

## LAMPIRAN 6

### KUISIONER ANALISIS SWOT

#### (ANALISA KUALITAS AIR TERHADAP PENGOPERASIAN KETEL UAP DI MV. NYK VEGA)

- I. Identitas responden : Taruna PIP Semarang  
 Nama : Ahmad Faisal Taufiq  
 Kelas/NIT : T VIII B/ 50134929.T

- II. Tanggapan responden  
 Acuan pengisian kuisisioner ini adalah sebagai berikut :  
 Penilaian urgensi Penanganan :

Angka 4 = sangat terkait

Angka 3 = terkait

Angka 2 = cukup terkait

Angka 1 = kurang terkait

Beri tanggapan menurut pendapat responden dengan memberikan tanda silang (X) pada pilihan tanggapan yang telah disediakan berdasarkan pertanyaan dibawah ini :

No	Indikator Kekuatan	Urgensi Penanganan			
		4	3	2	1
1	Air pengisian yang cukup			X	
2	Terdapatnya SOP yang baku		X		
3	Pemberian <i>Chemical Dosing Unit</i> yang sesuai			X	
4	Pengujian air ketel teratur				X

NO	Indikator Kelemahan	Urgensi Penanganan			
		4	3	2	1
1	Penginjeksian <i>chemical dosing</i> yang kurang baik		X		
2	Air tawar pengisian kotor		X		
3	Air kondensat yang belum banyak tersedia di kapal			X	
4	Air destilasi yang belum banyak tersedia di kapal	X			

NO	Indikator Peluang	Urgensi Penanganan			
		4	3	2	1
1	Pasokan <i>chemical dosing</i> unit dari perusahaan terpenuhi	X			
2	Pasokan test kit untuk air ketel dari perusahaan terpenuhi			X	
3	Dilakukan pengujian air ketel oleh teknisi dari perusahaan				X
4	Terdapat standard perawatan air ketel dari perusahaan		X		

NO	Indikator Ancaman	Urgensi Penanganan			
		4	3	2	1
1	Kondisi air tawar dari darat tidak memenuhi syarat untuk air ketel		X		
2	Tidak dilakukan pengujian air sebelum air dari darat di supply ke kapal	X			
3	Lamanya kapal berlabuh				X
4	Pencegahan pencemaran disekitar pelabuhan			X	

## LAMPIRAN 7

## Rekapitulasi Kuisioner

FAKTOR INTERNAL		Jumlah Penilaian Responden				Nilai dukung yang diambil
		1	2	3	4	
1	Air pengisian yang cukup	4	6	13	7	3
2	Terdapatnya SOP yang baku	7	7	10	6	3
3	Pemberian <i>Chemical Dosing Unit</i> yang sesuai	3	7	9	11	4
4	Pengujian air ketel teratur	6	7	9	8	3
5	Penginjeksian <i>chemical dosing</i> yang kurang baik	3	6	9	12	4
6	Air tawar pengisian kotor	0	5	12	13	4
7	Air kondensat yang belum banyak tersedia di kapal	3	7	9	11	4
8	Air destilasi yang belum banyak tersedia di kapal	3	5	9	13	4
FAKTOR EKSTERNAL		Jumlah Penilaian Responden				Nilai dukung yang diambil
		1	2	3	4	
1	Pasokan <i>chemical dosing</i> unit dari perusahaan terpenuhi	7	13	6	4	2
2	Pasokan <i>test kit</i> untuk air ketel dari perusahaan terpenuhi	8	10	6	6	2
3	Dilakukan pengujian air ketel oleh teknisi dari perusahaan	15	9	4	2	1
4	Terdapat standar perawatan air ketel dari perusahaan	6	7	9	8	3
5	Kondisi air tawar dari darat tidak memenuhi syarat untuk air ketel	3	4	9	14	4
6	Tidak dilakukan pengujian air sebelum air dari darat disupply ke kapal	2	5	12	11	3
7	Lamanya kapal berlabuh	3	8	10	9	3
8	Pencegahan pencemaran disekitar pelabuhan	3	6	13	8	3





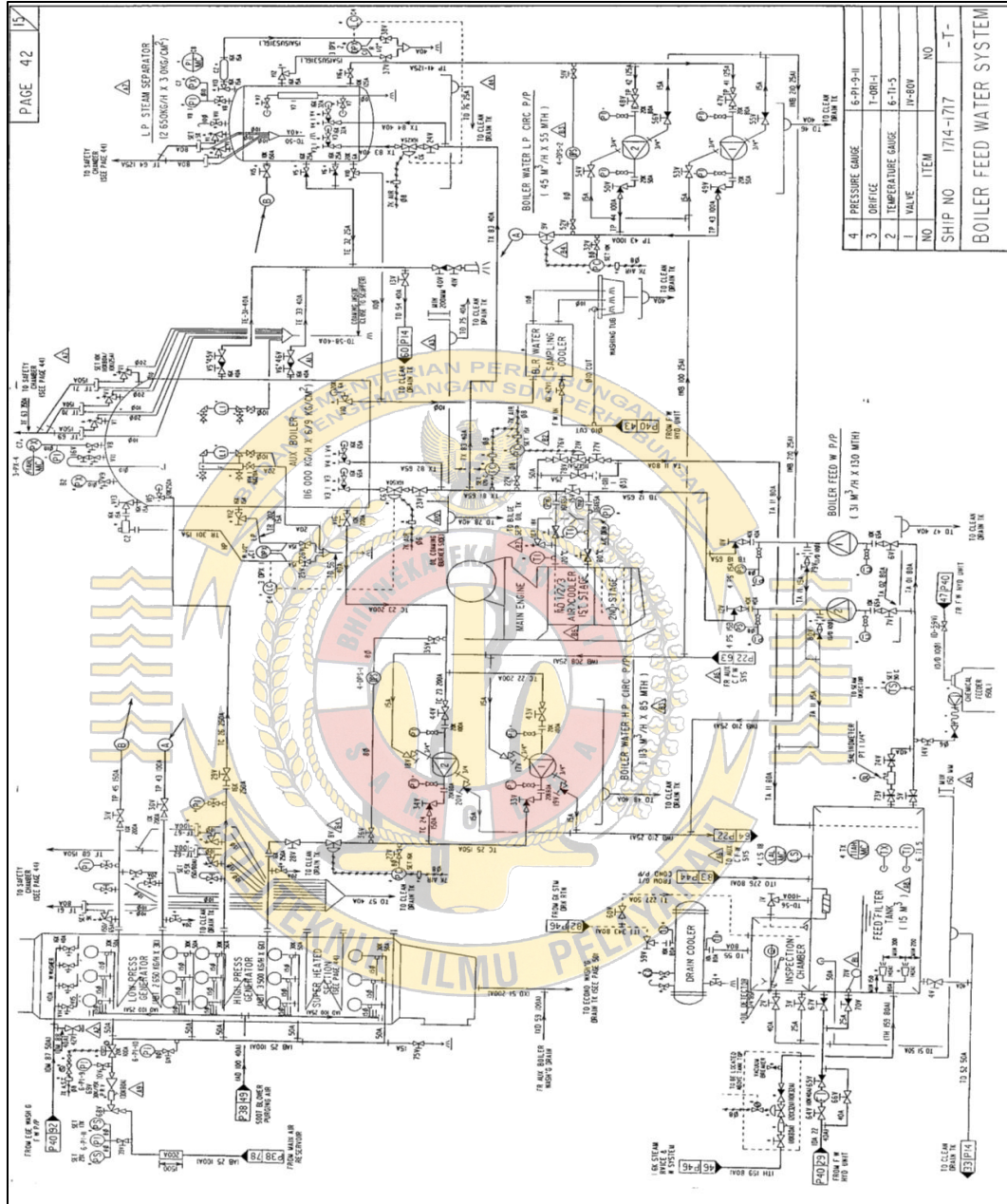
## LAMPIRAN 10

MAINTENANCE REPORT - Engine Department			
Name of Vessel: " M/V NYK VEGA "		Month: August 2016	Engine Department
SECTION - 1 : Major Maintenance Jobs Done during the Month			
S.No	Area / Equipment	Description of Job Done	Date Done
1	M/E	Bearing clearances checked	4-Aug-16
2	Oily Water Separator	Opened, cleaned, 2nd stage & 3rd stage filters renewed. NK Class survey c/out.	5-Aug-16
3	Turbo Generator	Total overhauling started by maker	5-Aug-16
4	M/E	No.1 & No.3 Air Cooler dismantled by yard	5-Aug-16
5	M/E	No.1 & No.3 Turbochargers dismantled by maker	6-Aug-16
6	No.1 & No.2 Air Reservoirs	Opened, cleaned, inspected by crew	6-Aug-16
7	No.1 & No.2 Bow Thrusters	Total overhauling started by maker	7-Aug-16
8	Low & High Sea Chest	Opened, cleaned, inspected by crew	7-Aug-16
9	No.2 M/E Start-up Pump	Motor overhauled	7-Aug-16
10	No.1 & No.2 M/E FO Heaters	Dismantled by yard and transferred to workshop	7-Aug-16
11	No.1 & No.2 G/E FO Heaters	Dismantled by yard and transferred to workshop	7-Aug-16
12	Boiler, LPSS & EGE	Mountings dismantled by yard and transferred to workshop	8-Aug-16
13	E/R Pumps & C/H Fans	Motors dismantled by yard and transferred to workshop	8-Aug-16
14	No.1 & No.2 CCFW	SW Pipes removed for new fabricated pipes	8-Aug-16
16	ICCP	Inspected by maker	8-Aug-16
17	M/E Jacket Preheater	Opened, cleaned by crew. Regulating 3-way valve o-rings renewed.	8-Aug-16
18	No.1, 2 & 4 M/E Auxiliary Blowers	Dismantled by yard and transferred to workshop	8-Aug-16
19	No.1, 2 & 3 Intermediate Shaft Bearings	Opened and inspected by yard	8-Aug-16
20	Bilge Tanks	Bilge Tank, BSOT, No.1 & No.2 FO Sludge Tank cleaned by yard	8-Aug-16
21	No.1 M/E Start-up Pump	Motor overhauled	9-Aug-16
22	M/E	LO Sump Tank cleaned by yard	9-Aug-16
23	No.1 HFO Settling Tank	Tank cleaned by yard	9-Aug-16
24	No.1 & No.2 M/E LO Purifier Heaters	Dismantled by yard and transferred to workshop	9-Aug-16
25	No.1 & No.2 G/E LO Purifier Heaters	Dismantled by yard and transferred to workshop	9-Aug-16
26	Overboard valves	Dismantled, lapped, cleaned by yard. Two storm valves renewed.	9-Aug-16
27	M/E	LO outlets 3-layer rubber packing renewed by crew	9-Aug-16
28	T/G Condenser	Opened and cleaned by yard	10-Aug-16
29	Vacuum Pump Sealing Unit Cooler	Cleaned by crew. Front cover fabricated by yard and renewed.	10-Aug-16
30	Stem Tube	Tank cleaned by crew	10-Aug-16
31	No.1 & No.2 T/G Condensate Pump	Motor overhauled	10-Aug-16
32	M/E	Alpha lubricators overhauled by maker	11-Aug-16
33	FWG	Bottom cover removed for new fabrication	11-Aug-16
34	M/E	Exhaust gas bellow gasket renewed	11-Aug-16
35	Steering Gear	Pumps overhauling started by maker	11-Aug-16
36	M/E	Pneumatic valves overhauled by maker	12-Aug-16
37	FWG	Distillate Pump motor overhauled	12-Aug-16
38	Engine console	New MOP-A installed, software updated by maker	12-Aug-16
39	Propeller	New propeller installed	13-Aug-16
40	AMP	New system and panels installed	13-Aug-16
41	SW Pumps	Corrosion flanges renewed by yard	13-Aug-16
42	Boiler & LPSS	Maintenance c/out by maker	14-Aug-16
43	No.2 JCFW Pump	Overhauled by crew due to leakage	14-Aug-16
44	HP Boiler W. Circulating Pump	Spare Pump overhauled	26-Aug-16
45	FWG	Plugged 1 tube due to FW leakage	29-Aug-16

## LAMPIRAN 11

MAINTENANCE REPORT - Engine Department			
Name of Vessel: " M/V NYK VEGA "		Month: September 2016	Engine Department
SECTION - 1 : Major Maintenance Jobs Done during the Month			
S.No	Area / Equipment	Description of Job Done	Date Done
1	Main Engine	Unit no.11 FOV replaced with reconditioned spares	1-Sep-16
2	Main Engine	Scavenge space cleaned	1-Sep-16
3	FWG Distillate Pump	Mechanical seal changed due to leakage	2-Sep-16
4	Main Engine	Unit no.1 FO Booster Pump replaced with reconditioned spare	6-Sep-16
5	No.4 D/G	Unit no.6 damaged. Inspection c/out.	7-Sep-16
6	Main Engine	Spare FO Booster Pump overhauled	8-Sep-16
7	No.4 D/G	Unit no.6 damaged cylinder cover and piston removed	8-Sep-16
8	Main Engine	Unit no.5 FO Booster Pump replaced with reconditioned spare	9-Sep-16
9	No.4 D/G	Turbocharger cartridge and nozzle ring found damaged / removed	9-Sep-16
10	Main Engine	Performance test and MOP adjustment c/out by MAN technician	10-Sep-16
11	Bunkering	HFO Bunkering c/out in port of Singapore	12-Sep-16
12	No.2 G/E LO Purifier	Total overhauling commenced	14-Sep-16
13	No.4 D/G	Unit no.6 damaged liner drew out	14-Sep-16
14	No.4 D/G	Unit no.6 new liner & piston installed	15-Sep-16
16	No.1 G/E LO Purifier	Opened for inspection due to oil leakage	15-Sep-16
17	Main Engine	Spare FO Booster Pump overhauled (1st pc)	16-Sep-16
18	Main Engine	Spare FO Booster Pump overhauled (2nd pc)	17-Sep-16
19	Oily Water Separator	SS Filters renewed due to low pressure/flow	18-Sep-16
20	No.3 D/G	Periodical maintenance c/out	20-Sep-16
21	G/E LO Overflow Tank	Tank cleaned and inspected	21-Sep-16
22	No.2 D/G	Performance test c/out	23-Sep-16
23	M/E FO Auto-Backwash Filter	Filter elements replaced with clean set	27-Sep-16
24	Sewage system	Aeration Tanks cleaning c/out	27-Sep-16
25	No.2 D/G	Periodical maintenance c/out	28-Sep-16
26	No.1 D/G	Tappet clearance adjustment c/out	28-Sep-16
27	Main Engine	Performance test c/out	28-Sep-16
28	Auxiliary Boiler	Rotary cup & Pilot burner overhauled	28-Sep-16
29	No.1 D/G	Unit no.2 cylinder cover & FOV replaced due to high temperature	30-Sep-16

LAMPIRAN 12



Gambar Piping Diagram Boiler Feed Water System



## LAMPIRAN 13

### SHIP'S PARTICULAR

1 NAME OF VESSEL : NYK VEGA  
 2 CALL SIGN : 3EIJ5  
 3 NATIONALITY : PANAMA  
 4 PORT REGISTRY : PANAMA  
 5 OFFICIAL NUMBER : 32318-07  
 6 IMO NUMBER : 9312781  
 7 OWNERS : VEGA-ALTAIR SHIPPING S.A. / UNIQUE ID NUMBER:5278140  
 8 CHARTERERS : NIPPON YUSEN KABUSHIKI KAISHA (NYK LINE)  
 9 OPERATORS : NYK SHIP MANAGEMENT PTE. LTD./ UNIQUE ID : 1968365  
 10 GROSS TONNAGE : 97,825 TONS  
 11 NET TONNAGE : 37,907 TONS  
 12 Max Loadable No. of Container : 8,652 TEU  
 13 DWT : 103,310 MT  
 14 LOA : 338.17 m  
 15 LBP : 321.00 m (REGISTERED - 325.37 m)  
 16 BREADTH MUOLDED : 45.60 m  
 17 DEPTH MOULDED : 24.60 m  
 18 DRAFT (SUMMER) : 14.524 m FREEBOARD (SUMMER) 5.659  
 19 DISPLACEMENT : 1200,302 MT  
 20 HULL TYPE : DOUBLE HULL  
 21 SUEZ CANAL I.D. NO. : 32105  
 22 SUEZ CANAL (GRT) : 98,275.92  
 23 SUEZ CANAL (NRT) : 84,867.72  
 24 HAMBURG PORT LICENSE NO. : AGS 010.2007  
 25 ELBE RIVER LICENSE NO. : J 08/07  
 26 MAIN ENGINE TYPE/NUMBER : DIESEL (Type: HYUNDAI B&W 12K98ME)  
 27 MCR (Maximum continuous rate) : 64,033 KW (87,060 BBHP) X 94 RPM X 1 UNIT  
 28 SERVICE SPEED : 25.0 K'ts (at Designed Draught & with 20% sea margin)  
 29 BOW THRUSTER : 5,438 HP (4,000 KW)  
 30 BUILDER : HYUNDAI HEAVY INDUSTRIES CO., LTD. (S.NO.1714)  
 31 BUILDING PLACE : ULSAN, KOREA  
 32 DATE KEEL LAID : 18TH JULY 2006  
 33 LAUNCHING : 4TH OCTOBER 2006  
 34 DELIVERY : 1ST DECEMBER 2006

BOW TO BRIDGE	: 245.65 m
BRIDGE TO STERN	: 92.52 m
BOTTOM TO TOP	: 65.19 m, ( 61.918 m when tilting MF/HF Antenna)

## LAMPIRAN 14

IMO CREW LIST							Page No 1/1
1. Name of Ship: <b>NYK VEGA</b>		2. Port of arrival: <b>Hongkong</b>		3. Date of arrival: <b>31 July 2016</b>			
4. Nationality of Ship: <b>PANAMA</b>		5. Last port of call: <b>Singapore</b>		6. Nature and No. of identity document			
7. No.	8. Family name, given names	9. Rank	10. Nationality	11. Date of birth		12. PASSPORT	13. Date of Expiry
1	Cocirlea, Iulian Constantin Mircea	MASTER	ROMANIAN	11-Aug-65	Sinaia	053368267	9-Oct-20
2	Naprilescu, Daniel Alexandru	C/O	ROMANIAN	30-Dec-77	Babadag	054106603	31-Aug-21
3	Hossain, Kamrul	2/O	BANGLADES HI	22-Oct-88	Chittagong	AF1254342	11-May-18
4	Calinsuay, Rex Caba-ot	3/O	FILIPINO	18-Jun-94	Bakun, Benguet	EB8028837	2-May-18
5	Rus, Claudiu	C/E	ROMANIAN	28-Feb-71	Dej	053804641	9-Jun-21
6	Nenita, Angelo Eduard	1/AE	ROMANIAN	7-Oct-65	Nanesti	052688640	4-Nov-19
7	Morarasu, Petre Bogdan	2/AE	ROMANIAN	6-Jan-81	Constanta	053880622	5-Jul-21
8	Furca, Doru Ionel	3/AE	ROMANIAN	15-Nov-89	Deva	052917205	22-Apr-20
9	Clarete, Omar Macatangay	E/E-2	FILIPINO	29-Dec-80	Batangas City	EB6031075	25-Jul-17
10	Daisog, Benedict Duran	H/ELECT	FILIPINO	28-Oct-88	Balimbing T-Tawi	EC0478745	4-Mar-19
11	Ninte, Stanley Nabua	BSN	FILIPINO	9-Feb-66	Matanao DVO DS	EB9991048	13-Jan-19
12	Calaliman, Romel Samillano	AB-A	FILIPINO	5-May-79	Tubungan Iloilo	EC6116457	30-Nov-20
13	Deveza, Anthony Estangco	AB-B	FILIPINO	5-Jul-69	Unisan Quezon	EC6250661	17-Dec-20
14	Olarte, Benie Ian Malinao	AB-C	FILIPINO	19-Dec-89	Ozamiz City	EB8329952	5-Jun-18
15	Gerolao, Rovyn Gocalin	OS-B	FILIPINO	17-Oct-90	Bulan Sorsogon	EC5362958	15-Sep-20
16	Dacuya, Jayvee Austero	DECK BOY	FILIPINO	24-Nov-94	Malinao Albay	EC2080490	11-Sep-19
17	Obsioma, Ale Mark Bacot	FMA	FILIPINO	13-Dec-90	Cag De Oro City	EC1413378	16-Jun-19
18	Anareta, Ronald Oblena	OLR-1	FILIPINO	7-Jun-79	Sampaloc Quezon	EC3687531	15-Mar-20
19	Cordero, Arnold Villagonsalo	OLR-A	FILIPINO	2-Nov-79	Pangantucan BKN	EC3062170	21-Dec-19
20	Arca, Michael Floyd Solmeo	OLR-B	FILIPINO	25-Jul-90	Angeles City	EC3098248	5-Jan-20
21	Mendoza, Amado Matangihan	WPR	FILIPINO	13-Sep-80	Calamba Laguna	EC0144825	27-Jan-19
22	Caspe, Hector Baylen	C/CK	FILIPINO	20-Dec-69	Iloilo City	EB9228930	24-Sep-18
23	Tolentino, Romeo Moral	2/CK	FILIPINO	29-Jun-64	Manila	EC6355774	8-Jan-21
24	Diente, Bobby Belgera	Messman	FILIPINO	30-Sep-89	Dingle Iloilo	EC6173957	9-Dec-20
25	Phan, Quang Ban	D/CDT-B	VIETNAMESE	8-Oct-92	Thai Binh	B9340907	22-Jul-24
26	Prakoso, Bima Sakti	D/CDT-C	INDONESIAN	11-Jun-95	Sidoarjo	B1490329	22-Jun-20
27	Taufiq, Ahmad Faisal	E/CDT-A	INDONESIAN	26-Jun-93	Pati	B1495869	30-Jun-20
28	Restu, Dwi Maryuana	E/CDT-B	INDONESIAN	17-May-95	Sukoharjo	B1496067	2-Jul-20
Capt. Cocirlea, Iulian Constantin Mircea							

LAMPIRAN 15



Gambar MV. NYK Vega