

Cargo DISCHARGING Operation Checklist Eight (8) Steps MANUAL Sequence Start	File:	Cargo
	Rev. No.:	2
	Rev. Date:	01-03-17
	Approved By:	DM

+Port: DISCHARGEPORT		Voyage No.: 02		Date: 01-Jan-2019	
No.	Description			Remarks	ç

	FINAL PREPARATION FOR DISCHARGING	30 min	
1.	CCR manned by two officers	As per duties	
2.	Delegation of CCR Team duties	Complete CCR Tasks Delegation Check List	
3.	IAS Monitors set properly	IAS Monitor set up diagram	
4.	Communications with Shore tested by all available means	Working channels confirmed VHF77	
5.	Internal Radio Communication Tested	Working channels confirmed UHG Ch. 5	
6.	Internal Phone Communication Tested	Working tel. No. 222 confirmed	
7.	Deck Watch in positions	Complete Main & Trunk Deck Tasks List	
8.	Vessel's liquid header & crossover confirmed cold	Ö-100°C	
9.	Eight (8) step cargo pumps MANUAL starting sequence confirmed	R/U sequence Tank: 2P→3S→4P→1S 2S→3P→4S→1P	
10.	Confirm all Main Cargo Pumps prepared and ready in MANUAL MODE	AUTO light illuminated	
11.	Confirm all Main Cargo Pumps are in SöBy Mode	öPOWER ONö (yellow) light illuminated	
12.	Discharging rate as agreed in Ship / Shore meeting	12,000m³/h	
13.	Initial maximum discharge rate agreed	1,000 m3/hr	
14.	Confirmed CTM opening quantity	____m3	
15.	LNG quantity to discharge confirmed with shore	____ m³	
16.	LNG heel quantity confirmed and advised to Shore	____ m³	
17.	Confirm Vapour from Shore by free flow available	Maintain CT @ 10 kPa(G)	
18.	Shore Tank Pressure confirmed	Expected 15 kPa(G)	
19.	Confirm all Branch valve CL*07 SHUT	Locally Confirmed	
20.	Confirm all Filling valve CL*00 OPEN	Locally Confirmed	

Cargo DISCHARING Operation Checklist Eight (8) Steps MANUAL Sequence Start	File:	Cargo
	Rev. No.:	2
	Rev. Date:	01-03-17
	Approved By:	DM

+Port: DISCHARGEPORT		Voyage No.: 02		Date: 01-Jan-2019	
No.	Description			Remarks	ç

21.	Line up independently checked by Gas Engineer or OOW	Discharge Plan + Logbook entry	
22.	Status of Vapour cross over BLOCK Valve CG075	Confirm OPEN (%) / CLOSE	
23.	Check Boil off Management ready condition	L/D Compressor, GCU, pre-cooler, aft-cooler	
24.	Confirm Water ballast lines filled with water (Make sure line not in vacuum before opening)	Water hammer precautions observed by inching	
25.	LNG Vaporiser ready condition in case required	Steam open	
26.	Line up independently checked by Gas Engineer or OOW and log same	ESD valves still shut	
27.	Public Announcement Made ÷CARGO OPERATION ABOUT TO START÷	All Company and Terminal Regulations apply	
28.	Obtain permission from Terminal to Open ESD Valves	Confirm Open locally	
29.	Confirm crew and officers in positions as agreed on pre-operational meeting	Manifold, Trunk Deck, Liq. Dome, Mooring stations, Gangwayí	
30.	FINAL PREPARATION SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	
	COMMENCE DISCHARGING OPERATION from CT No. 2	#2P	
1.	No. 2 CT Liquid dome manned	Suitable experience Officer	
2.	No. 2 CT PORT cargo pump started on MANUAL MODE	Filling valve OPEN Branch Valve SHUT Disch. Valve 15 % Open	
3.	Pumps stabilise on 41 Amps Load	➤ 600 m3/hr	
4.	Inform Shore that pump Started	Time of START	
5.	COMMENCE DISCHARGING by OPENING BRANCH VALVE and CLOSING FILLING VALVE	CL 207 OPEN CL 200 SHUT	
6.	INFORM SHORE COMMENCE DISCHARGING	Time of Commence	
7.	Liquid dome report / confirm	Pumps running Valves position No leakage	
8.	Liquid passing at manifold	Confirmed by sound of Liquid and Manifold pressure changes	

Cargo DISCHARGING Operation Checklist Eight (8) Steps MANUAL Sequence Start	File:	Cargo
	Rev. No.:	2
	Rev. Date:	01-03-17
	Approved By:	DM

+Port: DISCHARGEPORT		Voyage No.: 02		Date: 01-Jan-2019	
No.	Description			Remarks	ç

9.	Confirm cargo is being discharged from CT No. 2	Confirmed by CTM and Float Level gauges	
10.	Confirm other tanks cargo level gauges ó cargo not coming in	CT, 3, 4 & 1 Level steady	
11.	Cargo Tank Pressure Control at 10 kPa(G)	Confirm if RGB required	
12.	Terminal receiving cargo in shore tanks	Confirm verbally an record	
13.	Manifold pressure observed within expected limits	Max. 400 kPa(G)	
14.	COMMENCE DISCHARGING #2P SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	
	RAMP UP - START Discharging from CT No. 3	#3S	
1.	No. 3 CT Liquid dome manned	Suitable experience Officer	
2.	No. 3 CT STBD cargo pump started on MANUAL mode	Filling valve OPEN Branch Valve SHUT Disch. Valve 15 % Open	
3.	Pumps stabilise on 41 Amps Load	➤ 600 m3/hr	
4.	Inform Shore that pump Started	Time of START	
5.	COMMENCE DISCHARGING by OPENING BRANCH VALVE and CLOSING FILLING VALVE	CL 307 OPEN CL 300 SHUT	
6.	INFORM SHORE COMMENCE DISCHARGING	Time of Commence	
7.	Liquid dome report / confirm	Pumps running Valves position No leakage	
8.	Liquid passing at manifold	Confirmed by sound of Liquid and Manifold pressure changes	
9.	Confirm cargo is being discharged from CT No. 2, 3	Confirmed by CTM and Float Level gauges	
10.	Confirm other tanks cargo level gauges ó cargo not coming in	CT, 4 & 1 Level steady	
11.	Cargo Tank Pressure Control at 10 kPa(G)	Confirm if RGB required	
12.	Terminal receiving cargo in shore tanks	Confirm verbally an record	
13.	Manifold pressure observed within expected limits	Max. 400 kPa(G)	

Cargo DISCHARGING Operation Checklist Eight (8) Steps MANUAL Sequence Start	File:	Cargo
	Rev. No.:	2
	Rev. Date:	01-03-17
	Approved By:	DM

+Port: DISCHARGEPORT		Voyage No.: 02		Date: 01-Jan-2019	
No.	Description			Remarks	ç

14.	COMMENCE DISCHARGING #2P SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	
	RAMP UP - START Discharging from CT No. 4	#4P	
1.	No. 4 CT Liquid dome manned	Suitable experience Officer	
2.	No. 4 CT PORT cargo pump started on MANUAL mode	Filling valve OPEN Branch Valve SHUT Disch. Valve 15 % Open	
3.	Pumps stabilise on 41 Amps Load	➤ 600 m3/hr	
4.	Inform Shore that pump Started	Time of START	
5.	COMMENCE DISCHARGING by OPENING BRANCH VALVE and CLOSING FILLING VALVE	CL 407 OPEN CL 400 SHUT	
6.	INFORM SHORE COMMENCE DISCHARGING	Time of Commence	
7.	Liquid dome report / confirm	Pumps running Valves position No leakage	
8.	Liquid passing at manifold	Confirmed by sound of Liquid and Manifold pressure changes	
9.	Confirm cargo is being discharged from CT No. 2, 3, 4	Confirmed by CTM and Float Level gauges	
10.	Confirm other tanks cargo level gauges & cargo not coming in	CT.1 Level steady	
11.	Cargo Tank Pressure Control at 10 kPa(G)	Confirm if RGB required	
12.	Terminal receiving cargo in shore tanks	Confirm verbally an record	
13.	Manifold pressure observed within expected limits	Max. 400 kPa(G)	
14.	COMMENCE DISCHARGING #2P SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	
	RAMP UP - START Discharging from CT No. 1	#1S	
1.	No. 1 CT Liquid dome manned	Suitable experience Officer	
2.	No. 1 CT STBD cargo pump started on MANUAL mode	Filling valve OPEN Branch Valve SHUT Disch. Valve 15 % Open	
3.	Pumps stabilise on 41 Amps Load		

Cargo DISCHARING Operation Checklist Eight (8) Steps MANUAL Sequence Start	File:	Cargo
	Rev. No.:	2
	Rev. Date:	01-03-17
	Approved By:	DM

+Port: DISCHARGEPORT		Voyage No.: 02		Date: 01-Jan-2019	
No.	Description			Remarks	ç

4.	Inform Shore that pump Started	Time of START	
5.	COMMENCE DISCHARGING by OPENING BRANCH VALVE and CLOSING FILLING VALVE	CL 107 OPEN CL 100 SHUT	
6.	INFORM SHORE COMMENCE DISCHARGING	Time of Commence	
7.	Liquid dome report / confirm	Pumps running Valves position No leakage	
8.	Liquid passing at manifold	Confirmed by sound of Liquid and Manifold pressure changes	
9.	Confirm cargo is being discharged from CT No. 1, 2, 3, 4	Confirmed by CTM and Float Level gauges	
10.	Cargo Tank Pressure Control at 10 kPa(G)	Confirm if RGB required	
11.	Terminal receiving cargo in shore tanks	Confirm verbally an record	
12.	Manifold pressure observed within expected limits	Max. 400 kPa(G)	
13.	COMMENCE DISCHARGING #2P SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	
	RAMP UP - start second pump in CT No. 2	#2S	
1.	No. 2 CT Liquid dome manned	Suitable experience Officer	
2.	No. 2 CT STBD cargo pump started on MANUAL MODE	Discharge. Valve 15 % Open	
3.	Pumps stabilise on 41 Amps Load	➤ 600 m3/hr	
4.	Inform Shore that pump Started	Time of START	
5.	Liquid dome report / confirm	Pumps running Valves position No leakage	
6.	Liquid passing at manifold	Confirmed by sound of Liquid and Manifold pressure changes	
7.	Confirm cargo is being discharged from CT No. 1, 2, 3, 4	Confirmed by CTM and Float Level gauges	
10.	Cargo Tank Pressure Control at 10 kPa(G)	Confirm if RGB required	

Cargo DISCHARING Operation Checklist Eight (8) Steps MANUAL Sequence Start	File:	Cargo
	Rev. No.:	2
	Rev. Date:	01-03-17
	Approved By:	DM

+Port: DISCHARGEPORT		Voyage No.: 02		Date: 01-Jan-2019	
No.	Description			Remarks	ç

11.	Terminal receiving cargo in shore tanks	Confirm verbally an record	
12.	Manifold pressure observed within expected limits	Max. 500 kPa(G)	
13.	START SECOND PUMP in CT 2 SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	
	RAMP UP - start second pump in CT No. 3	#3P	
1.	No. 3 CT Liquid dome manned	Suitable experience Officer	
2.	No. 3 CT PORT cargo pump started on MANUAL mode	Discharge. Valve 15 % Open	
3.	Pumps stabilise on 41 Amps Load		
4.	Inform Shore that pump Started	Time of START	
5.	Liquid dome report / confirm	Pumps running Valves position No leakage	
6.	Liquid passing at manifold	Confirmed by sound of Liquid and Manifold pressure changes	
7.	Confirm cargo is being discharged from CT No. 1, 2, 3, 4	Confirmed by CTM and Float Level gauges	
10.	Cargo Tank Pressure Control at 10 kPa(G)	Confirm if RGB required	
11.	Terminal receiving cargo in shore tanks	Confirm verbally an record	
12.	Manifold pressure observed within expected limits	Max. 500 kPa(G)	
13.	START SECOND PUMP in CT 3 SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	
	RAMP UP - start second pump in CT No. 4	#4S	
1.	No. 4 CT Liquid dome manned	Suitable experience Officer	
2.	No. 4 CT STBD cargo pump started on MANUAL mode	Discharge. Valve 15 % Open n	
3.	Pumps stabilise on 41 Amps Load	Discharge Valve auto opening	
4.	Inform Shore pump Started	Time of START	

Cargo DISCHARHING Operation Checklist Eight (8) Steps MANUAL Sequence Start	File:	Cargo
	Rev. No.:	2
	Rev. Date:	01-03-17
	Approved By:	DM

+Port: DISCHARGEPORT		Voyage No.: 02		Date: 01-Jan-2019	
No.	Description			Remarks	ç

5.	Liquid dome report / confirm	Pumps running Valves position No leakage	
6.	Liquid passing at manifold	Confirmed by sound of Liquid and Manifold pressure changes	
7.	Confirm cargo is being discharged from CT No. 1, 2, 3, 4	Confirmed by CTM and Float Level gauges	
10.	Cargo Tank Pressure Control at 10 kPa(G)	Confirm if RGB required	
11.	Terminal receiving cargo in shore tanks	Confirm verbally an record	
12.	Manifold pressure observed within expected limits	Max. 500 kPa(G)	
13.	START SECOND PUMP in CT 3 SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	
	RAMP UP - start second pump in CT No. 1	#1P	
1.	No. 1 CT Liquid dome manned	Suitable experience Officer	
2.	No. 1 CT PORT cargo pump started on MANUAL mode	Discharge. Valve 15 % Open	
3.	Pumps stabilise on 41Amps Load	Discharge Valve auto opening	
4.	Inform Shore that pump Started	Time of START	
5.	Liquid dome report / confirm	Pumps running Valves position No leakage	
6.	Liquid passing at manifold	Confirmed by sound of Liquid and Manifold pressure changes	
7.	Confirm cargo is being discharged from CT No. 1, 2, 3, 4	Confirmed by CTM and Float Level gauges	
10.	Cargo Tank Pressure Control at 10 kPa(G)	Confirm if RGB required	
11.	Terminal receiving cargo in shore tanks	Confirm verbally an record	
12.	Manifold pressure observed within expected limits	Max. 500 kPa(G)	
13.	START SECOND PUMP in CT 3 SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	

Cargo DISCHARGING Operation Checklist Eight (8) Steps MANUAL Sequence Start	File:	Cargo
	Rev. No.:	2
	Rev. Date:	01-03-17
	Approved By:	DM

+Port: DISCHARGEPORT		Voyage No.: 02		Date: 01-Jan-2019	
No.	Description			Remarks	ç

	RAMP UP - continuo	Ramp Up Diagram	
1.	Ramp up continue until maximum discharge rate agreed (12,000 m3/h) or 500 kPa (manifold) (increase each pump CT No. 2,3,4 by 2 Amps slowly)	Final Amps: No. 2 CT = 60 A No. 3 CT = 60 A No. 4 CT = 58 A	
2.	Decrease Amps Cargo Pump on CT No.1	Final Amps: No.1 CT = 50 A	
3.	Confirm cargo is being discharged from all CT	Both by CTM and Float Level gauges	
4.	Manifold pressure observed within expected limits	Max. 500 kPa(G)	
5.	Confirm Vapour from shore available by free flow (keep CT pressure 10 kPa(G))	Control pressure VAPOUR CROSS OVER BLOCK VALVE CG075	
6.	RAMP UP - continuo SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	
	FULL RATE ACHIEVED	12,000 m3/hr	
1.	Full rate achieved	Confirm with Shore	
2.	Maximum discharge rate as agreed 12,000 m3/h) or 500 kPa (manifold)	Final Amps: No. 1CT = 50 A No. 2 CT = 59 A No. 3 CT = 59 A No. 4 CT = 58 A	
3.	Cargo Tank Pressure Control, 10 kPa(G)	Confirm RGB in use and in order	
4.	Cargo Tank liquid levels	Level dropping in each tank	
5.	Liquid header and manifold pressures monitored	Normal pressure range 50-100 kPa(G)	
6.	Final Safety rounds completed before setting CCR / Deck Normal Watch	As per Duties	
7.	FULL RATE SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	
	BULK DISCHARGING	Hourly check	
1.	C/O Standing and Night Orders	Understood, agreed and Signed	
2.	CCR manned properly	by OOW and C/O or G/E if operationally required	

Cargo DISCHARGING Operation Checklist Eight (8) Steps MANUAL Sequence Start	File:	Cargo
	Rev. No.:	2
	Rev. Date:	01-03-17
	Approved By:	DM

+Port: DISCHARGEPORT		Voyage No.: 02		Date: 01-Jan-2019	
No.	Description			Remarks	ç

3.	Ship / Shore Checklist öRö code carried out as agreed with terminal	If shore representative is not attending ship ö Call Terminal and advise C/O	
4.	Cargo operation records maintained (Hourly) Stability, Hourly Rate, Manifold press, Vapour Arm Angle, IBS/IS, Nitrogen, Cofferdam Heating	Inform C/O in case difference outside agreed	
5.	Hourly reports to Terminal Cargo Rate, Cargo O/B, ETC R/Dí	Inform C/O in case difference outside agreed	
6.	Discharging Operation execution as per Plan (Cargo O/B, Draft, trim, list, hull stresses)	Inform C/O in case difference outside agreed	
7.	Cargo tank level gauge readings compared (float vs. radar) at 75%, 50% and 25% of cargo volume on board	Inform C/O in case difference outside agreed	
8.	Visual drafts obtained (daytime) and compared with draft gauges / CTMS / loading computer	Inform C/O in case difference outside agreed	
9.	Cargo tank staggering for Ramp Down sequence matching planned	Hourly check / Inform C/O difference more than 20 cm	
10.	Cargo Tank Pressure Control, 10 kPa(G)	Call C/O if press. >14<7 Inform Shore >15<6 kPa	
11.	Cargo Tank liquid levels Level dropping in each tank according to plan	Inform C/O in case difference outside agreed	
12.	Liquid header and manifold pressures monitored	Normal pressure range 50-100 kPa(G)	
13.	BULK LOADING SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	
	BALLASTING		
1.	Sufficient Notice to Engine room Given for WBP requirements	As agreed on pre-arrival meeting	
2.	Permission from terminal to commence ballasting operation requested	Log same	
3.	Make sure WB line not in vacuum before start line up	Inform C/O if vacuum present	
4.	Line up (gravity) confirmed correct	Water hammer effect precautions observed	
5.	Ballasting by gravity commenced	Confirm by level gauges	
6.	Line up (Ballasting pumps) confirmed correct	Water hammer effect precautions observed	

Cargo DISCHARHING Operation Checklist Eight (8) Steps MANUAL Sequence Start	File:	Cargo
	Rev. No.:	2
	Rev. Date:	01-03-17
	Approved By:	DM

+Port: DISCHARGEPORT		Voyage No.: 02		Date: 01-Jan-2019	
No.	Description			Remarks	ç

7.	Ballasting by ballast pumps resumed	Confirm by level gauges	
8.	Confirm ballasting executed as per plan	Inform C/O if ballasting behind schedule 15 min max	
9.	DE-BALLASTING SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	
	RAMP DOWN PREPARATION	30 min to R/D	
1.	Final Confirmation Cargo Tanks levels coming as per Ramp down planed sequence	Advise C/O	
2.	Cargo tank level gauge readings compared (float vs. radar)	difference inside 10cm	
3.	Tank pressure controlled at 10 kPa(G)	RGB in use	
4.	Chief officer present in CCR	As per standing / night order book	
5.	CCR manned properly	by two (2) officers	
6.	Trunk Deck manned properly	As per duties	
7.	Main Switchboard manned for stopping pumps manually if required	Electrician advised	
8.	Communications test with terminal carried out	All available means of communication	
9.	Notice prior to ramp down given to the terminal	10 min	
10.	Announcement made R/D about to commence	Deck, Engine, Captain	
11.	ETC time advised to Agent	Pilot booking 3 hrs after ETC	
12.	RAMP DOWN PREPARATIOS SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	
	RAMP DOWN	60 min to ETC	
1.	1 st Pump Stopped	Confirmed by Trunk deck	
2.	2 nd Pump Stopped	Confirmed by Trunk deck	
3.	3 rd Pump Stopped	Confirmed by Trunk deck	
4.	4 th Pump Stopped	Confirmed by Trunk deck	
5.	Cargo Tank Pressure Control 10 kPa (G)	RGB in use / Stopped	

Cargo DISCHARING Operation Checklist Eight (8) Steps MANUAL Sequence Start	File:	Cargo
	Rev. No.:	2
	Rev. Date:	01-03-17
	Approved By:	DM

+Port: DISCHARGEPORT		Voyage No.: 02		Date: 01-Jan-2019	
No.	Description			Remarks	ç

6.	Liquid header and manifold pressures monitored	Max. 500 kPa(G))	
7.	5 th Pump Stopped at final level in tank	Confirmed by Trunk deck	
8.	6 th Pump Stopped at final level in tank	Confirmed by Trunk deck	
9.	Cargo Tank Pressure Control 10 kPa(G)	RGB in use / Stopped	
10.	Liquid header and manifold pressures monitored	Max. 500 kPa(G)	
11.	7 th Pump Stopped at final level in tank	Confirmed by Trunk deck	
12.	8 th Pump stopped at final level in tank	Confirmed by Trunk deck	
13.	Cargo Tank Pressure Control 10 kPa (G)	RGB Stopped	
14.	Status of Vapour cross over BLOCK Valve CG075	Confirm OPEN (%) / CLOSE	
15.	Filling valve and Branch valve of the last cargo tank maintained 100% open	Confirmed by Trunk deck	
16.	COMMENCE RAMP DOWN SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	
COMPLETION OF DISCHARGING OPERATION			
1.	Cargo not flowing at manifold	Manifold Watch confirm	
2.	Cargo level steady all tanks	Trunk Deck watch confirm	
3.	All liquid manifold ESD valves shut	Terminal consent required	
4.	Liquid header and manifold pressures monitored	No pressure	
5.	Status of Vapour cross over BLOCK Valve CG075 (10 kPa(G)	Confirm OPEN (%) / CLOSE	
6.	Trim & list adjusted when cargo loading operation completed for CTM if required (by gravity)	Even keel & upright	
7.	Ensure line up for departure correct ó no line blocked ó allow for thermal expansions		
8.	COMPLETION OF LOADING SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	
LIQUID ARMS DRAINING			

Cargo DISCHARHING Operation Checklist Eight (8) Steps MANUAL Sequence Start	File:	Cargo
	Rev. No.:	2
	Rev. Date:	01-03-17
	Approved By:	DM

+Port: DISCHARGEPORT		Voyage No.: 02		Date: 01-Jan-2019	
No.	Description			Remarks	ç

1.	All liquid manifold ESD valves shut	Confirmed by IAS and Locally	
2.	Manifold manned properly	Gas Engineer present	
3.	Line up confirmed correct	As per Load Plan	
4.	Ship side liquid arms & manifolds confirmed liquid free	Terminal and Ship	
5.	ESDS blocked upon completion of draining	Confirmed by CCR to Manifold	
6.	LIQUID ARMS DRAINING SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	
LIQUID ARMS PURGING & DISCONNECTION			
1.	Manifold manned properly	Gas Engineer present	
2.	Line up confirmed correct	As per Load Plan	
3.	Ship side Liquid arms & manifolds confirmed gas free	CH₄ ≤ 2.0% Vol	
4.	Cargo arms disconnected	Confirmed	
5.	Manifold blind flanges confirmed fully bolted & tightened	Blank On	
6.	Water curtain to be stopped (call E/R to stop GS pump)	Confirm by Manifold watch	
7.	LIQUID ARMS PURGING & DISCONNECTION SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	
FINAL CTMS			
1.	Record each tank level, volume, pressure	Manual Calculation	
2.	Calculate TOTAL cargo on board	Manual Calculation	
3.	Calculate CARGO QUANTITY LOADED	CTMS ÷ After Unloading report	
4.	Cargo tank float gauge readings recorded	Trunk Deck & Recorded in Logbook	
5.	LIQUID ARMS PURGING & DISCONNECTION SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	
START BOIL OFF MANAGEMENT		GCU	
1.	Start GCU by free flow	Free flow	

Cargo DISCHARGING Operation Checklist Eight (8) Steps MANUAL Sequence Start	File:	Cargo
	Rev. No.:	2
	Rev. Date:	01-03-17
	Approved By:	DM

+Port: DISCHARGEPORT		Voyage No.: 02		Date: 01-Jan-2019	
No.	Description			Remarks	ç

2.	Start GCU by L/D Compressor	4 t/hr	
3.	Cargo Tank Pressure Control	10 kPa(G)	
4.	START BOIL OFF MANAGEMENT SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	
	PREPARATION FOR DEPARTURE		
1.	Ship Vapour arms & manifolds confirmed gas free	CH ₄ 0.2.0% Vol	
2.	Vapour Manifold blind flanges confirmed fully bolted & tightened	Blank on	
3.	Cargo tank float gauges raised & secured	Confirmed by Gas Engineer	
4.	Manifold drain scoops swung inboard	Confirmed by Gas Engineer	
5.	ESD connection powered off (terminal approval)	Confirmed by Gas Engineer	
6.	Optical cable disconnected	Confirmed by Gas Engineer	
7.	All entries in port log (time sheet) confirmed accurate	Confirmed by OOW	
8.	Post-discharging meeting carried out	Master; C/O and Duty Officer	
9.	Departure trim & list adjusted	Trim & List = zero	
10.	Ballast pumps stopped	Eductor secured	
11.	All ballast system valves confirmed closed/open as per departure condition to avoid pressure build up	As per Plan	
12.	Line up to prevent cargo lines pressure build up confirmed correct (vapour thermal expansion precautions)	As per Plan	
13.	Departure stability condition printed out	Confirmed in order	
14.	On ESD Page light up ðOverride Extreme High Levelð (ESD 99.5%) and ðOverride Very High levelð level (TPS 99.0%) alarms (to be to protect system activation of ESD at sea) and Turn NOTICE board in CCR to ð ESD OVERRIDE	Verified and witnessed by Master, and record same in log book	
15.	Shore Gangway removed (shore staff disembarked)	Confirmed by Gas Engineer	
16.	Cargo Control Room VHF	switched off	
17.	PREPARATION FOR DEPARTURE SECTION COMPLETED	VERBALLY AGREED BY CCR TEAM	

Cargo DISCHARGING Operation Checklist Eight (8) Steps MANUAL Sequence Start	File:	Cargo
	Rev. No.:	2
	Rev. Date:	01-03-17
	Approved By:	DM

+Port: DISCHARGEPORT		Voyage No.: 02	Date: 01-Jan-2019	
No.	Description		Remarks	ç

ADDITIONAL REQUIREMENTS			
	Rank	Name	Signature
C/L compiled by:	Chief Officer		
C/L checked by:	Gas Engineer		
	1 st Officer		
	2 nd Officer		
	3 rd Officer		
	Master		