# Terminal Information Booklet



# Moerdijk

# **1** INTRODUCTION:

The latest edition of the international Safety Guide for Oil Tankers and Terminals and The Moerdijk Port Authority regulations are applicable, in conjunction with the Shell Chemicals Terminal Moerdijk Terminal Information Booklet.

Tankers must at all times comply with national and international regulations, IBC Code, TSG and ADN requirements. The criteria stated in this Terminal Information Booklet does not relief the Tanker and/or Terminal from their obligation to use best judgement when assessing suitability, or conditions for loading and discharging, alongside Shell Terminal Moerdijk.

The master shall ensure that staff, delegated to conduct cargo handling operations are certified, qualified and competent. At all times sufficient crew should be available onboard to keep an efficient and safe deck and cargo watch.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 1 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

Inhoudsopgave	1	INTR	ODUCTIO	DN:	1
	2	FIRE 2.1 2.2 2.3	EMERG EMERG	ERGENCY RESPONSE: ENCY ALARMS: ENCY COMMUNICATIONS: ENCY ACTIONS:	4 4
	3	SAFE 3.1 3.2 3.3 3.4	GENER PERSO PORT A	SECURITY: AL: NAL PROTECTIVE EQUIPMENT: ND TERMINAL SECURITY: NNAL AND VEHICULAR ACCESS:	
	4	PRE- 4.1 4.2 4.3	ETA-AD CALL A	COMMUNICATIONS: VICE VIA PORTXCHANGE T FINAL APPROACH RIVAL EXCHANGE OF INFORMATION:	10 10
	5	ARR 5.1 5.2 5.3	BERTH PILOTA	PORT APPROACH: GE: RAGE AND WAITING AREAS:	14 14
	6	BER <sup>7</sup> 6.1 6.2 6.3 6.4 6.5 6.6 6.7 6.8 6.9 6.10 6.11 6.12 6.13	GENER BERTH MAXIMI AIRDRA TOTAL DRAUG TUGS A MAXIMI PROVIS MOORII RESTRI EMERG	ND MOORING: AL DESCRIPTION OF BERTH: LIMITATIONS ALONGSIDE: JM BEAM: AFT: DISPLACEMENT T JETTY: HT TO & FROM MOERDIJK: ND TOWAGE: JM APROACH SPEED SION OF MOORING CREWS: NG: ICTIONS ENCY TOWING OFF PENDANTS (ETOPS OR MOORING REQUIREMENTS	15 15 16 16 16 16 16 16 16 16 17 17 17 17 5 FIRE WIRES)17
	7	COM 7.1 7.2 7.3	GENER SHIP/SI	TIONS WHILE BERTHED: AL: HORE SAFETY CHECK LIST AND OPS. AGRE JNICATIONS DURING CARGO TRANSFER:	
	8	RES 8.1 8.2 8.3 8.4 8.5	JURISD CONDIT RESPO RESPO	ITIES: ICTION: FIONS OF SHIP ACCEPTANCE: NSIBILITIES: NSIBILITIES FOR LOADING: NSIBILITIES FOR UNLOADING:	
	9	OPE 9.1		ALONGSIDE:	
	10	10.1 10.2 10.3 10.4 10.5 10.6 10.7	CHECK ENVIRC EMERG DRY CE HANDLI CRAFT GARBA	JETTIES & CONNECTIONS S ON QUANTITIES TRANSFERRED: DNMENTAL CRITERIA FOR SUSPENDING OP ENCY SHUTDOWN: RTIFICATES': ING OF SHIP'S STORE AND SPARE GEAR: ALONGSIDE: GE RECEPTION FACILITIES:	23 ERATIONS:23 23 23 23 23 23 24 24 24 24
Filenaam: BBS MF Terminal Information			Rev.: B.9	Inhoudelijk beheer: DMS/91F13 Eigenaar (SPO): DMS/91F1	Pagina: 2 van 35 Niveau: 03

	10.8	POTABLE WATER:	24
	10.9	BUNKERS AND LUBRICATING OILS:	25
	10.10	SLOPS AND BALLAST RECEPTION FACILITIES:	25
	10.11	LOADING & DISCHARGING AGREEMENT:	
	10.12	ADDITIONAL DANGEROUS PRODUCT INSTRUCTION:	
	10.13	STATIC ELECTRICITY:	
	10.14	IF A FLAMMABLE MIXTURE IS PRESENT THEN:	
	10.15	EMPTYING LINES	
	10.16	SAMPLING POLICY	
	10.17	INHIBITOR DOSING AT MOERDIJK	
	10.18	DEPARTURE / ORDERING PILOT & BOATMEN:	27
11	SAFET	Y REQUIREMENTS:	.28
	11.1	SMOKING:	28
	11.2	USE OF MATCHES AND LIGHTERS:	28
	11.3	MANAGING SHIP-/SHORE INTERFACE:	
	11.4	HSE LETTERS OF PROTEST:	
	11.5	TERMINAL EVALUATION BY SHIP:	
	11.6	ACCESS TO SHIP & CLEANLINESS SHIPS DECK:	
	11.7	ENTERING ENCLOSED SPACES:	
	11.8	INSPECTION AND/OR DIVING ALONGSIDE JETTIES:	
	11.9	DRUG AND ALCOHOL POLICY:	29
	11.10	PORTABLE ELECTRICAL EQUIPMENT, INCLUDING PHONES AND PAGERS:	30
	11.11	ENVIRONMENTAL PROTECTION:	
	11.12	ELECTRICAL STORMS:	
12		CABLE TERMINAL REGULATIONS:	
	12.1	ULLAGING AND SAMPLING:	
	12.2	CLOSED OPERATIONS:	
	12.3	INERT GAS:	
	12.4	STATE OF READINESS OF MAIN ENGINES:	
	12.5	MAINTENANCE AND REPAIR WORK ONBOARD:	
	12.6	HOT WORK ON BOARD: TANK CLEANING, PURGING AND GAS FREEING:	
	12.7	TANK CLEANING, PURGING AND GAS FREEING:	33
13	APPEN	NDIX A: CONTACT LIST:	.34
14	APPEN	NDIX B: PLAN OF PORT LAYOUT	.34
15	APPEN	NDIX C: PLAN OF BERTH LAYOUT	.35
16	APPEN	IDIX D: MOORING PLANS	.35

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 3 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

# 2 FIRE AND EMERGENCY RESPONSE:

#### 2.1 EMERGENCY ALARMS:

#### 2.1.1 In case of fire on the terminal or other ship

- 1. Sound one or more blasts on the ships whistle, each blast of not less than 10 seconds duration supplemented by a continuous sounding of the general alarmsystem.
- 2. Contact the Central Site Emergency Controlroom telephone: +31168 35 5345
- 3. Stand by to cease all cargo operations and then close all valves
- 4. Stand by to disconnect hoses or arms
- 5. Stand by to start engines

#### 2.1.2 In case of fire on the ship

- 1. Raise alarm
- 2. Inform terminal
- 3. Fight fire and prevent fire spreading
- 4. Stand by to cease all cargo operations and then close all valves
- 5. Stand by to disconnect hoses or arms
- 6. Stand by to start engines

#### 2.1.2.1 Emergency respons in case of fire on a ship.

In case of a fire emergency on a ship the Shell emergency Response personel will concentrate the response on the Shell asset. The authorities, who will take over command in such a situation will decide what to do with the vessel and her crew.

#### 2.1.3 Fire alarm on the terminal

Fire alarm: Sirene with alternating frequency (sinus wave)

All save signal: Continuous high pitch sound during 1 minute

Testing fire alarm: Monday at 12:00 hrs and Saturday 16:45 hrs – 17:00 hrs

#### 2.2 EMERGENCY COMMUNICATIONS:

At the Shell Chemicals Moerdijk berth, the primary method of communication will be via the UHF radio provided by the terminal to ships on their arrival alongside.

The terminal will provide the ship with a portable radio, set on the loading office frequency. The ship will sign a receipt which will be countersigned for receipt by the shore upon returning the set to the shore representative. In 2nd case there is a 24/7 jettyman present on the jetty. Also during the ship-shore loading and discharging conference the Loadingmaster will write down the mobile number of the ship mobile phone. However in case of a non communication occasion the loading and discharging needs to be stopped by the ship on a safe way.

Loadingmaster: +31168-35 5189

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 4 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

# 2.3 EMERGENCY ACTIONS:

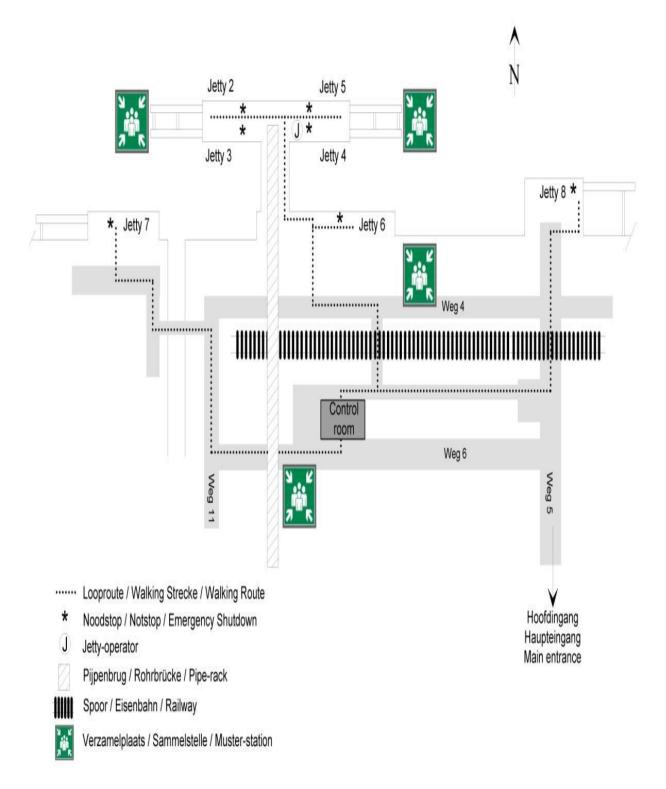
ACTION-SHIP	ACTION-BERTH
Emergency on your ship	Emergency on a ship
• Raise the alarm	• Raise the alarm
• Cease all cargo/ballast operations and close all valves if discharging. If loading only close valve after terminal advise it is safe to do so, after stopping their pumps.	Contact ship
Inform Terminal Representative	• Cease all cargo operations and close all valves
<ul> <li>In case of fire, fight fire and prevent from spreading</li> </ul>	• Stand by to disconnect hoses or loading arms
• Stand by to disconnect hoses or loadingarms	• If necessary, stand by to assist fire fighting
Bring engines to standby	Inform all ships in the vicinity
	Implement berth emergency plan
Emergency on another ship	Emergency ashore
Stand by, and when instructed:	• Raise alarm
Cease all cargo/ballast operations and close all valves	Cease all cargo operations and close all valves
Disconnect hoses or loadingarms	• In case of fire, fight fire and prevent it from spreading
• Bring engines and crew to standby, ready to unberth	• If required, stand by to disconnect hoses or loadingarms
	Implement berth emergency plan

# 2.3.1 International Shore Fire Connection

The terminal has 2 International Shore Fire Connections conform ISGOTT appendix E 5.5 available on the T-jetty. If the fire alarm is raised the fire water grid on the terminal will be pressurized from minimum 8 bar up to 13 bar maximum.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 5 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

#### 2.3.2 Evacuation plan.



Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 6 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

#### 2.3.3 Evacuation.

In case of an evacuation and the main entrance of the jetty is blocked, a safe location can be created at the far end of our jetty heads, see muster signs. Boatman craft on site is available.

In case of vessel is required to be removed from our jetty then first clear communication should be established between ships master and loadingmaster to discuss this operation. The following items should be considered: tugboat - , boatmancraft assistance, release of ropes.

In case of an emergency and an evacuation is required and access to main entrance is not blocked the muster station near the MFD controllroom building should be considered. See also the evacuation plan on the frontsite of this document.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 7 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

# **3 SAFETY AND SECURITY:**

#### 3.1 GENERAL:

Responsibility for the safe conduct of operations whilst your ship is alongside our terminal rests jointly with you, as Master of the vessel, and with the Terminal loading master.

We wish therefore, before operations start, to seek your full co-operation and understanding of the safety requirements set out in the Ship/Shore safety checklist, which are based on safe practices that are widely accepted by the oil and tanker industries.

We expect you, and all under your command, to adhere strictly to these requirements throughout your vessels stay alongside Shell Terminal and we, for our part, will ensure that our personnel do likewise, and co-operate fully with you in the mutual interest of safe and efficient operations.

Before commencing operations, and every 4 hours as stated repetitive items of the Ship/Shore safety checklist, a terminal representative together with a vessel representative, will make a routine inspection round on your vessel to ensure that all elements addressed within the scope of the Ship/Shore safety checklist are being managed in an acceptable manner. Where corrective action is needed, we will not agree to operations commencing or, should they have started, we will require them to be stopped.

If you consider that safety is being endangered by any action on the part of our staff or by any equipment under the control of the Shell Terminal, you should demand immediate for cessation of operations.

#### THERE CAN BE NO COMPROMISE WITH SAFETY!

#### 3.2 PERSONAL PROTECTIVE EQUIPMENT:

The following minimum dress code shall be adhered to by ship's personnel while on duty alongside the Berth:

- Boiler suit.
- Safety helmet
- Safety shoes or boots with steel toe caps.
- Life jacket or buoyancy aid when working outside safety rails.

Personnel engaged in operations are actively encouraged to utilise PPE to the fullest extent during cargo transfer, hose handling and mooring operations. This includes the wearing of safety goggles.

People visiting ships moored alongside the T-jetty must wear a safety helmet while entering the T-jetty. In a white box at the parkingfacilities near the T-jetty and in yellow boxes on the manifolds safety helmets are available. Guest must pick up (and wear) a safety helmet when entering the T-jetty area and leave the safety helmet in the white box after leaving the covered T-jetty area.

#### 3.3 PORT AND TERMINAL SECURITY:

This is to inform you that as from 010704 Shell Pernis/Europoort/Moerdijk wishes to comply with the provisions of the International Ship & Port Facility Security Code.

You are therefore invited to complete the attached Declaration of Security, together with our representative who is acting on behalf of the Port Facility Security Officer of the installation. You may wish to use your own DoS; we will accept this provided it is in every detail identical to the template, as mentioned as Appendix 1 in the Appendix to part B of the code.

Should you require any further security-related information, please feel free to contact our PFSO or Loadingmaster.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 8 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

#### 3.4 PERSONNAL AND VEHICULAR ACCESS:

#### 3.4.1 Access to SNC Moerdijk

Prior to arrival ships agent has to arrange a Visitorslist during the Ships Port Stay in writing (i.e. current crewlist) to Site Security via <u>www.ship2report.com</u>. Persons of which Site Security isn't notified are denied acces to the Shell site. If external medical assistance (i.e. in case of a personal accident) is called in, please advice the loadingmaster so he can inform site security about their arrival.

Technicians and shipchandlers must report and identify themselves to site security at the gate.

#### 3.4.2 For ships moored alongside SNC jetties

In order to control the persons allowed to board/disembark the vessel, as well as for general security reasons, identification is required for legitimation by all crew members. For this purpose a passport or seamansbook is required and should be shown at the gate. Furthermore we request you to inform us about the representatives of firms and the visitors you wish to have on board, so they can be added to the crew list.

#### 3.4.3 Entering the terminal from the ship

Access to the Shell Terminal is not allowed other then for staff involved in the cargo transfer. Therefore visits to the shore by crewmembers must be arranged via the ships Agent. The Agent will inform the Shell Installation security <u>www.ship2report.com</u> about the shore visit and arranged transport. Accordingly Shell Security Department will allow access for arranged transport on the Installation to pick-up or deliver crew at the jetty.

#### 3.4.4 Entering the jetties from the shore

Before entering the jetties or loading areas one must report themselves to the Terminals control room or announce themselves via the intercom on the car park near the entrance of the T-jetty.

Entering jetties during mooring and unmooring is for safety reasons not allowed. Mooring and unmooring is an activity with increased risk where only the presence of specialised people is accepted. If desired or neccessary one can wait in our harbour offices canteen.

When mooring of the ship and placing of the gangway is completed, the jetty operator will, via the control room, release the jetty for access.

#### 3.4.5 Walking at Shell Moerdijk premises outside the jetty is prohibited

When a crewmember needs to go ashore, a taxi must be ordered via the ships agent. It is not allowed to walk at the Shell Moerdijk premises outside the jetty and parking lot located next to the T jetty. The taxi must pick up the crew member at the parking lot. This does not apply to inland barge masters reporting to Loading Master. Barge master or his delegate can walk to the MFD waterfront office using the required PPE, taking all safety precautions into consideration.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 9 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

# 4 PRE-ARRIVAL COMMUNICATIONS:

#### 4.1 ETA-ADVICE VIA PORTXCHANGE

#### ETA to Shell Moerdijk via PortXchange Digital Platform:

Shell Moerdijk lays emphasis in efficiency and fast turnaround of the port call, with minimum delay. For realtime port call updates it has implemented the digital platform PortXchange, developed by Port of Rotterdam. Your participation as master / agent is key in achieving the overall efficiency by both parties. Barges are expected to be familiar with this application on the digital platform via a direct account and the "skipper app". For seagoing vessels, the ships agent will act on behalf of the master.

#### Inland Barges:

Barges calling Shell Moerdijk Terminal are required to provide ETA information (at Terminal) via the PortXchange platform, operated by the Port of Rotterdam. Upon sending the ETA, the skipper will receive the information on ETB(PTB) and ETD(PTD) at the terminal via PortXchange. Please update ETA changes of more than 1 hour. The terminal updates changes of more than 2 hours in ETB/ETC, but one hour is the time resolution the Loading Master need from barges for proper planning

See below the link for PortXchange website (SkipperApp):

https://skipper.port-xchange.com/Login

#### Sea-going vessels:

Agents of sea going vessels calling Shell Moerdijk Terminal are required to provide ETA information (for arrival Maas Center) via the PortXchange platform, operated by the Port of Rotterdam. Agents can comply with this requirement via a direct account with the platform or follow their current process of updating ETA information in PortBase. The agent will be able to receive terminal planning information on vessel's ETB/PTB and ETD/PTD at the terminal via PortXchange. As a measure of best practice, please update ETA changes of more than 4 hours or less (closer to arrival)

#### 4.2 CALL AT FINAL APPROACH

Prior to final approach (between 15 and 30 minutes before arrival), the ship has to report to SNC-Moerdijk loadingmaster via phone (+31168355189) or VHF (channel 6, 8). This will enable the terminal to communicate status of the berth or any delay due to unforeseen circumstances and also to issue final directives.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 10 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

#### 4.3 PRE-ARRIVAL EXCHANGE OF INFORMATION:

To the Master of vessel	:
Ship is scheduled for jetty	:
ETA	:

Agent of the vessel, we expect you to send this information to the above described vessel.

REQUEST FROM SHIP to complete Pre-Arrival Exchange of Information as described in this document.

Due to the complexity of Chemical cargo handling all operational ship/shore issues will be discussed between Loadingmaster and ship cargo officer on arrival.

#### **ISPS**:

Shore Security Level	: Level 1
PFSO Pernis	: Mr. Ron Schut
PFSO Moerdijk	: Mr. Wim Groenendijk
Deputy PFSO_Moerdij	K : Security dept.(24 hrs), tel: +31-168355345

Ship's Agent to arrange Visitors list during the Ship's Port Stay Loadingmaster will also represent PFSO

#### **Terminal info:**

Pernis: No vapour emission Control system (VEC) will be in use for vessels.
Moerdijk: Vapour emission Control system (VEC) will be in use for vessels.
Cargo hoses with 8-/6-inch connection available, to be discussed with Loadingmaster on Arrival.
Terminal Gangway available
Slops, Garbage, Bunkers; no Terminal Facilities available.
Detailed Terminal and Pre-arrival information is available via website.

#### Shell Pernis, Chemicals Terminal Information Booklet:

https://snr-bbs.nl/port-information-mooring-plans/

#### Shell Moerdijk Terminal Information Booklet:

https://snr-bbs.nl/port-information-mooring-plans/

Mooring plans can be found in the Terminal Information Booklet.

#### For guidelines on Rotterdam port entry:

https://www.portofrotterdam.com/sites/default/files/port-information-guide.pdf

#### For guidelines on Moerdijk port entry:

http://portofmoerdijk.nl

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 11 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

#### **Pre-Arrival Exchange of Information**

Please Provide Terminal with following Information :

- 01. Advise name of Master
- 02. Advise name/rank Ship Security Officer and Ship Security Level
- 03. Advise name of Ship Owner
- 04. Advise Holding Capacity of Mooring winches
- 05. Advise Ship's
  - Arrival Draft (FW)
  - Departure Draft (FW)
- 06. Advise displacement on arrival
- 07. Advise LOA
- 08. Advise Parallel Body length
  - On arrival
  - At completion cargo-transfer
- 09. Advise Waterline to manifold distance. Please be aware that during cargo transfer operations the waterline to manifold distance may never exceed the distance as mentioned in chapter 10 of the Terminal Information Booklet; dimensions jetties and connections. A manifold is considered the presentation flange as per OCIMF and CDI Recommendations for Oil and Chemical Tanker Manifolds
  - On arrival
  - At completion cargo-transfer
- 10. Advice distance from preferred liquid connection (presentation flange) to bow Advice distance from preferred liquid connection (presentation flange) to stern
- 11. Advise estimated Discharge/Loading Time and Total Port Stay
- 12. BL-figures(MT)/Load order(MT) per grade to be Discharged/Loaded at our Terminal

Grade 1: Grade 2: Grade 3:

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 12 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

13. Preferred Discharge/Loading sequence if more than one Grade

Grade 1: Grade 2: Grade 3:

- 14. Advise average Cargo temperature on Arrival (when Discharging)
- 15. Advise Max. Allowed Cargo temperature (when Loading)
- Acceptable closed sampling system for Shell Moerdijk means a system that can take samples from a line system that circulates the product (for example DOPAK) or Gas Sampling Bombes
   Is vessel equipped with a closed measuring/sampling system
- 17. Confirm that N2-installation (if fitted) is fully operational and in good working condition
- 18. Advise if any repairs are necessary. Only repairs needed for Safe sailing of your vessel are allowed (after Terminal Approval and Permit Port Authorities, to be arranged via Ship's Agent)
- Advise delivery Stores and/or Bunkers, in general only allowed via approved barge (pref. on arrival) to be arranged via Ship's Agent
  (Intended Bunkering/storing of a ship are communicated to our waterfront planning section a day before the expected arrival of the vessel)
- 20. Advise the number of manifold connections/sizes available for the operation at our terminal, including the vapour recovery connection
- 21. Advise if vessel is free of any defects of hull, machinery or equipment that could adversely affect safe operations or delay commencement of cargo handling
- 22. Enclosed space entry, including cargo tank entry for inspection, is prohibited at Shell Moerdijk as per site HSE requirements. Cargo tank inspection from deck level is only allowed when loading arm is not connected and tanks are clean, gasfree and not inerted. Advise awareness and compliance

Kind Regards, Shell Chemical Marine Jetty planning

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 13 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

# 5 ARRIVAL OF PORT

#### 5.1 BERTH APPROACH:



#### 5.2 PILOTAGE:

Seagoing vessels of >70mtr. and/or carrying hazardous materials are obliged to have a pilot on board in order to sail into the Moerdijk

<u>http://www.portofrotterdam.com/en/Shipping/sea-shipping/port-information/Documents/port\_information\_guide.pdf</u>

# 5.3 ANCHORAGE AND WAITING AREAS:

http://www.portofrotterdam.com/en/Shipping/sea-shipping/portinformation/Documents/port\_information\_guide.pdf

At the Shell Moerdijk Terminal it is not allowed to use anchors. Approach of the jetties has always to be done at safe speed; when safe speed cannot be maintained, tug assistance has to be arranged (see 6.7). Whilst moored alongside, anchors should be properly secured by brake and guillotine, but otherwise be available for immediate use.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 14 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

# 6 BERTHING AND MOORING:

#### 6.1 GENERAL DESCRIPTION OF BERTH:

Shell Chemicals Moerdijk site has a T jetty with 4 manifolds and on foot of jetty, manifold 6 and 7 which are only in use for inland barges.T- jetty is located in Hollands Diep at Location N 51 41 30.7, E 4 33 43.4



#### 6.2 BERTH LIMITATIONS ALONGSIDE:

th, draft, SDV	NT, max displacen			
Maximum length (M)	Maximum draft alongside in fresh water	Maximum approach draft in fresh water	Maximum SDWT per jetty	Max displacement per jetty.
145*	8.4	8	25.000	39.000
120	8.4	8	20.000	26.000
120	8.4	8	20.000	26.000
150	8.4	8	25.000	39.000
135	5.3	n/a	20.000	26.000
135	5	n/a	nvt	nvt
100	6.2	n/a	nvt	nvt
160	8	8	25.000	39.000
	Maximum length (M) 145* 120 120 120 150 135 135 135	Maximum length (M)Maximum draft alongside in fresh water145*8.41208.41208.41508.41355.313551006.2	length (M)alongside in fresh waterapproach draft in fresh water145*8.481208.481208.481508.481355.3n/a1355n/a1006.2n/a	Maximum length (M)Maximum draft alongside in fresh waterMaximum approach draft in fresh waterMaximum SDWT per jetty145*8.4825.0001208.4820.0001208.4820.0001508.4825.0001355.3n/a20.0001355n/anvt1006.2n/anvt

Manifold 7 is only for barges

Manifold 8 is only for barges

Manouvring restrictions apply for berths 4, 6 and 8 due to Shell Moerdijk cooling water inlet

\*Maximum LOA may be exceeded to a maximum of 160mtr, waiver by MFD management / MTA required

\*\*Manifold 6 is only for Barges and coastal ships with additional approval

\*\*\*In the <u>Westelijke Insteekhaven</u>, on the western side, a lay by berth (mooring poles) is positioned for exclusively Shell seagoing vessels only. Berthing is only after approval from jetty planning or loading master. Activities that can be performed there are subject to loading master approval.

The maximum approach draft to Shell Moerdijk is depending on the chart depth, water level and UKC policy requirment and is set to maximum 8m in Fresh Water.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 15 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

#### Moerdijk BBS handleiding MFD.03.3630

Whilst alongside a berth, the minimum UKC by Shell Moerdijk Terminal is 1.5% of the moulded breadth of the vessel, but not not less than 0.5m. The maintaned depth alongside T jetties 2,3,4,5 is minimum 9m at NAP (actual waterlevel is plus or minus waterlevel at NAP).

The Port of Moerdijk area is via de Oude Maas accessible for seagoing vessels with a draft of 8.50 metres (incl. 5% UKC requirement by Port of Moerdijk), plus or minus NAP (Normaal Amsterdams Peil). NAP is the reference used for Dutch inland waterways. RWS (Rijks Water Staat) will endeavour to maintain a positive water level compared to NAP. The actual and predicted water level can be checked on: <a href="https://waterinfo.rws.nl/#!/kaart/">https://waterinfo.rws.nl/#!/kaart/</a>

For reference check depth charts from Rijkswaterstaat Directie Zuid Holland. Max SDWT: SGS report OP02.30299. On arrival Port of Rotterdam checks draft of all vessels to guarantee safe access to all Ports including Dordrecht and Moerdijk.

#### 6.3 MAXIMUM BEAM:

The maximum beam is 32.00 metres as per Moerdijk Port authority.

#### 6.4 AIRDRAFT:

The maximum height of seagoing vessels sailing into Moerdijk is 45.00 metres at NAP water level.

#### 6.5 TOTAL DISPLACEMENT T JETTY:

Be aware that the total deadweight is taken into account for forces against jetty. For example: a ship with SDWT 25.000 berthed on manifold 2 with a bunker barge alongside with SWDT from 7000 is not allowed

#### 6.6 DRAUGHT TO & FROM MOERDIJK:

https://www.portofmoerdijk.nl/scheepvaart/vaarweginfo-en-meteo/

#### 6.7 TUGS AND TOWAGE:

The number of tugs may vary throughout the year, and the numbers mentioned below are averages.

Bollard pull 28 – 45 Tons: 13 Bollard pull 50 – 65 Tons: 15 Bollard pull 70 – 80 Tons: 5

Tugboat types: conventional, ASD-type and tractor tugs. All the tugs are equipped with proper rubber fenders on the front and the stern.

The principal purpose of a harbor tug is helping to control ships during the transit of narrow channels, in turning basins and for careful controlling during the final stages of coming alongside a berth.

Safe use of harbor tugs is the responsibility of the ship's master, under a pilot's advice.

The terminal loading master is supposed to communicate with the pilot in case of any doubt of the use of a tugboat. Pilots can always be contacted via Dirkzwager or Boatman.

There is no minimum requirement on tugs set by the port authority of Moerdijk for the application of the port jurisdiction area.

Shell Moerdijk minimum tug boat requirement						
No bow thruster         Bow thruster						
LOA	All wind conditions	Wind up to 6 bft	Wind 6 bft or more			
Up to 120m	1	-	-			
120m, or more	2	-	1			

The terminal tug requirement may be increased per the individual Pilot judgment's/advice, with vessel maneuvering capability and weather conditions.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 16 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

#### 6.8 MAXIMUM APROACH SPEED

The max approach speed to berth on T-jetty is 0.1 m/sec = 0.02 NM/hr.

#### 6.9 PROVISION OF MOORING CREWS:

If the ship is in one of the following categories, use of the services of the boatmen or of the ship's crew to secure the lines is compulsory:

•ships longer than 75 meters

•tankers

In the Port of Moerdijk, in particular for the larger vessels, mooring boats are used to speed up the mooring process and can be used in case of emergency (i.e. malfunctioning bow thruster etc.)

These mooring boats are robust, powered by engines up to 200 hp and can sail at a speed of 10 knots. They are also equipped with direct radio communication with the pilot, and fitted with watertight compartments. Ropes are secured with a special hydraulic clamp for extra safety. On the shore side boatmen are equipped with special winch cars, fitted with a hydraulic winch with a SWL of 1,2 Tons and spot lights for berthing at night time.

#### 6.10 MOORING:

#### 6.10.1 Mooring along the T-jetty

Normally ships will berth according to the "bow out"-principle. Along jetty 4 portside mooring and along jetties 2, 3, 5 and 6(see 5.2)starboard mooring. Deviating from this rule can occur because of other vessels and/or optimising jetty equipment availability. It is recommended that the pilot contacts the loadingmaster by mobile phone +31168355189 for assurance or by VHF channel 6 or 8.

#### 6.10.2 Rules for mooring in general

- Breast lines should be oriented as perpendicular as possible to the longitudinal Centre line of the vessel and as far aft and forward as possible.
- Spring lines should be oriented as parallel as possible to the longitudinal Centre line of the vessel.
- The vertical angle of the mooring lines should be kept to a minimum.
- Generally, mooring lines of the same size and type (material) should be used for all leads. If this is not possible due to the available equipment, all lines in the same service, i.e. breast lines, spring lines, headlines, etc. should be the same size and type. For example, all spring lines could be wire and all breast lines synthetic.
- Mooring lines should be arranged so that all lines in the same service are about the same length between the vessel's winch and the shore bollard. Line elasticity varies directly with line length and shorter lines will assume more load.

#### 6.11 RESTRICTIONS

In order to prevent clogging of the central cooling water intake of SNC-Moerdijk only manifolds 2, 3, 4 and 5 can be used by seagoing vessels.

For the same reason it is forbidden for seagoing vessels to turn near the central cooling water intake which is situated between manifold 6 and 8. The cooling water intake is marked by 3 illuminated freestanding poles. Within which perimeter no ships are allowed.

#### 6.12 EMERGENCY TOWING OFF PENDANTS (ETOPS OR FIRE WIRES)

This item is still on the ISGOTT checklist. However, as OCIMF advises to discontinue this practice, this item is not being enforced by the Port of Rotterdam.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 17 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

#### 6.13 MINIMUM MOORING REQUIREMENTS

#### Seagoing:

Ships upto 10.000 Dwt: 2 Head- and Sternlines, 2 Springlines Fore and Aft

Ships upto 25.000 Dwt: 3 Head- and Sternlines, 2 Springlines Fore and Aft

Ships over 25.000 Dwt: 4 Head- and Sternlines, 2 Springlines Fore and Aft

SDWT is mentioned because of the common notation.

Although SDWT is mentioned, be aware that the total deadweight is taken into account for forces against jetty.

SDWT plus lightweight = Displacement.

Barges:

All barges 1 Head- and Stern line, 1 Spring line Fore and Aft.

Link to Jetty drawings:

https://snr-bbs.nl/port-information-mooring-plans/

# 7 COMMUNICATIONS WHILE BERTHED:

#### 7.1 GENERAL:

Responsibility for the safe conduct of operations whilst your ship is alongside our terminal rests jointly with you, as Master of the vessel, and with the Terminal loading master.

We wish therefore, before operations start, to seek your full co-operation and understanding of the communication procedure.

Shell Terminal wants full co-operation with you in the mutual interest of safe and efficient operation.

- There must be a continue radio communication established during the entire stay of the vessel alongside Shell Terminal
- The officer engaged in cargo operations should always be in contact with the Terminal Loading Master
- A radio check should be conducted every hour
- A lack of communication results in cessation of the cargo operation
- The battery exchange should be arranged by loading master every 8 hours
- Communication language is EnglishTo enable contact between ship and control room we will issue a
  portable radioset to the ships officer. This will enable him to contact the control room to
  report/discuss progress of operations, report unsafe situations and calamities.

#### 7.2 SHIP/SHORE SAFETY CHECK LIST AND OPS. AGREEMENT:

On arrival at the berth, the Terminal representative will present the ship with a copy of a folder containing the following documents:

- Ship/Shore Safety Check List
- Cargo Transfer Plans
- Port Security Requirements

# 7.3 COMMUNICATIONS DURING CARGO TRANSFER:

The terminal will provide the ship with a portable radio, set on the loading office frequency. The ship will sign a receipt which will be countersigned for receipt by the shore upon returning the set to the shore representative. In 2nd case there is a 24/7 jettyman present on the jetty. Also during the ship-shore loading and discharging conference the Loadingmaster will write down the mobile number of the ship mobile phone. However in case of a non communication occasion the loading and discharging needs to be stopped by the ship on a safe way.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 18 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

# 8 **RESPONSIBILITIES**:

#### 8.1 JURISDICTION:

The Moerdijk Port is within the jurisdiction of the Port of Moerdijk. Therefore the vessel could be subject to inspection by inspectors of the Transport and Environmental Safety Department or Port State Control. Because port operations take place around the clock, these inspections take place during day- and nighttime. Our experience has learned that on many occasions, especially during the night, documentation or certificates were not available. To ensure a smooth operation, we advise to keep the following documentation and certificates (or certified copies of certificates) available at all times.

- IOPP
- SOPEP
- Shipboard marine pollution emergency plan
- Garbage record book
- Oil record book part I and II
- Certificate of Fitness chemical/gas, including product list
- Procedures and arrangements manual
- Cargo record book
- Safety checklist
- Stowage plan on arrival and departure
- Material safety datasheet('s)
- Bill of lading
- Shipping document for bulk liquid cargoes

#### 8.1.1 Inspections from port state control:

The Paris Memorandum of Understanding (MOU) on Port State Control aims at eliminating the operation of sub-standard ships through a harmonized system of Port State Control inspections on foreign ships in the Paris MOU ports. The organization consists of 25 participating member states and covers the waters of the European coast and the North Atlantic basin from Canada to Europe.

The Dutch Port State Control is carried out by the Transport and Water Management Inspectorate of the Netherlands. It deals with approximately 1,400 inspections each year. Inspections take place on board, ensuring that these ships meet international safety, security and environmental standards, and that crewmembers have adequate living and working.

#### 8.2 CONDITIONS OF SHIP ACCEPTANCE:

Ships are accepted at Shell Chemicals Moerdijk site on the understanding that operations will be conducted in accordance with all applicable legislation, together with practices contained in relevant Codes of Practice, in particular, the guidance contained within the latest edition of the International Safety Guide for Oil Tankers and Terminals (ISGOTT).

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 19 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

#### 8.3 **RESPONSIBILITIES:**

Responsibility for the safe conduct of operations whilst your ship is alongside our terminal rests jointly with you, as Master of the vessel, and with the Terminal loading master.

We wish therefore, before operations start, to seek your full co-operation and understanding of the safety requirements set out in the Ship/Shore safety checklist, which are based on safe practices that are widely accepted by the oil and tanker industries.

We expect you, and all under your command, to adhere strictly to these requirements throughout your vessels stay alongside Shell Terminal and we, for our part, will ensure that our personnel do likewise, and co-operate fully with you in the mutual; interest of safe and efficient operations.

Before commencing operations, and every 4 hours as stated repetitive items of the Ship/Shore safety checklist, a terminal representative together with a vessel representative, will make a routine inspection round on your vessel to ensure that all elements addressed within the scope of the Ship/Shore safety checklist are being managed in an acceptable manner. Where corrective action is needed, we will not agree to operations commencing or, should they have started, we will require them to be stopped.

If you consider that safety is being endangered by any action on the part of our staff or by any equipment under the control of the Shell Terminal, you should demand immediate for cessation of operations.

#### THERE CAN BE NO COMPROMISE WITH SAFETY!

#### 8.4 **RESPONSIBILITIES FOR LOADING:**

Shell Chemicals Europe Moerdijk owns the jetties and therefore is responsible for the operational handling of ships alongside the jetties. The captain/skipper of a ship remains legally responsible for the activities on board of the vessel.

#### 8.5 RESPONSIBILITIES FOR UNLOADING:

The terminal will monitor Loading & discharging operations

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 20 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

# 9 OPERATIONS ALONGSIDE:

#### 9.1 GENERAL:

#### 9.1.1 Personal attendance of jetty operator on the jetty:

During your stay along our jetty a jetty operator will be permanently present on the jetty during active loading and discharging operations. He or She will also assist (dis)connecting hoses/loading arms and will start or stop operations in full cooperation with ships cargo officer. The jetty operator is in continuous radio contact with our control room en will supervise the loading and discharging activities on our behalve and is your contact regarding all loading and discharging matters. The jetty operator will periodically visit your ship in order to discuss progress of operations and carry out inspections (repetitive checks) on board of your vessel and shore, conform the ship shore safety checklist. When unsafe situations or calamities occur, he or she will, in cooperation with the vessels crew, take care that loading/discharging operations are immediately and safely stopped.

#### 9.1.2 Camera surveillance with remote control of cargo systems:

During your stay along our jetty loading and discharging operations are under continuous camera surveillance from our staff in the control room. The cargo facillities itself are remotely controlled from the same control room. One of our staff will periodically visit your ship in order to carry out inspections (repetitive checks) on board of your vessel, and shore, conform the ship shore safety checklist. The jetty operator will also assist (dis)connecting hoses/loading arms and will start or stop operations in full cooperation with ships cargo officer.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 21 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

# **10 DIMENSIONS JETTIES & CONNECTIONS**

For efficiency reasons we request the agent to transmit the dimensions of the shore connections to the ship which should be copied onto the ships cargo connection before ships arrival at our terminal.

Product	liquid size	vapour size	e Manifold/ berth nr.		Airdraft W.L. to Manif railing, which is high	
	ASA	ASA	NR		Meter	
Butadiene	8" 300#	6"300#	2	B + V	11.00	
Crude C4	8" 300#	6"300#	2	B + V	11.00	
Ethylene	8" 300#	4"150#	2	B + V	10,00	
P.O.	6" 150#	4"150#	2	B + V	11,00	
Propylene	8" 300#	6"300#	2	B + V	11.00	
Butadiene	8" 300#	8"300#	3	B + V	9,00	
Ethylene	6" 300#	6"150#	3	B + V	7,00	
LPG (butane)	8" 300#	8"300#	3	B + V	9,00	
P.O.	6" 150#	6"150#	3	B + V	5,25	
Propylene	8" 300#	8"300#	3	B + V	9,00	
Benzeen	8" 150#	6"150#	4	B + V	7,00	
C6 Raffinate	8" 150#	6"150#	4	B + V	7,00	
DCPD	6" 150#	6"150#	4	B + V	5,25	
DEG	6" 150#	n/a	4	B + V	7,00	
ECR	6" 150#	6"150#	4	B + V	5,25	
Ethyl Benzene	8" 150#	6"150#	4	B + V	8,00	
Fuel /Hydrowax	6" 150#	n/a	4	B + V	5,25	
HC Reformate	8" 150#	6"150#	4	B + V	6,00	
IP feed	8" 150#	6"150#	4	B + V	7,00	
LCCCO	6" 150#	n/a	4	B + V	5,25	
MEG	8" 150#	n/a	4	B + V	7,00	
MLO-Kgo	6" 150#	6"150#	4	B + V	5,25	
MSPO water	6" 150#	6"150#	4	B + V	7,00	
Pygas HC / tail	8" 150#	6"150#	4	B + V	7,00	
Styreen monomer	8" 150#	6"150#	4	B + V	5,25	
Veova	6" 150#	n/a	4	B + V	7,00	
Versatic	6" 150#	n/a	4	B + V	7,00	
Benzene	8" 150#	6"150#	5	B + V	7,00	
C6 Raffinate	8" 150#	6"150#	5	B + V	7,00	
DCPD	8" 150#	6"150#	5	B + V	7,00	
DEG	6" 150#	n/a	5	B + V	7,00	
Ethyl Benzene	6" 150#	6"150#	5	B + V	7,00	
HC Reformate	8" 150#	6"150#	5	B + V	7,00	
IP feed	8" 150#	6"150#	5	B + V	7,00	
Filenaam: BBS MFD	03.3630	Rev.: B.9	Inhoudelijk b	eheer: DMS	/91F13	Pagi

Filenaam: BBS MFD 03.3630<br/>Terminal Information BookletRev.: B.9Inhoudelijk beheer: DMS/91F13Pagina: 22 van 35Eigenaar (SPO): DMS/91F1Niveau: 03

#### Moerdijk BBS handleiding MFD.03.3630

MEG	8" 150#	n/a	5	B + V	7,00
MLO-Kgo	8" 150#	6"150#	5	B + V	7,00
MSPO water	6" 150#	6"150#	5	B + V	7,00
Pygas HC / tail	8" 150#	6"150#	5	B + V	7,00
Styreen monomer	8" 150#	6"150#	5	B + V	7,00
Veova	6" 150#	n/a	5	B + V	7,00
Versatic	6" 150#	n/a	5	B + V	7,00

#### 10.1 CHECKS ON QUANTITIES TRANSFERRED:

Hourly checks verified between operator and officer of the watch on board the vessel.

#### 10.2 ENVIRONMENTAL CRITERIA FOR SUSPENDING OPERATIONS:

#### Wind restrictions

- 1) At **30 knots**, (**15m/sec**, **7 bft**) MFD Controll Room (CR) windmeter reading check with ships windmeter. LM will get in contact with Master of the vessel.
- 2) At **37 knots**, (**19 m/sec**, **8 bft)** longer then 5 minutes all cargo handling activities will be stopped and the loadingarms / shipmanifolds will be made empty as much as possible. Also check gangway (safe Access) can be quaranteed. If necessary contact the local MTA.
- 3) At **43 knots**, **(23m/sec**, **9 bft**) longer then 5 minutes disconnecting loading arms/hoses. Also check gangway (safe Access) can be guaranteed. If necessary contact the local MTA.
- 4) The LM has to initiate a conference between LM, Master and MTA about the departure of the vessel.

#### **10.3 EMERGENCY SHUTDOWN:**

#### 10.3.1 Emergency stop loading

The terminal will provide the ship with an emergency stop on the cargo deck. This should be positioned on a save location, far from likely sources (i.e. hoses, loadingarms, pumps etc.) of leakages or other incidents. It should be easily and safely accessible for the deckwatch or cargo officer. It should only be pressed in case of emergency.

To deal with minor leakages operations are preferably stopped in cooperation with the terminal in a controlled manner. Thus minimising the risk of further escalation.

#### 10.3.2 Emergency stop discharging

Discharging operations can be stopped by the vessel at any time by stopping pumps and closing ships valve. Shore must be informed. If an emergency stop is required by shore, ship will be informed verbally, cellphone or radio.

#### 10.4 DRY CERTIFICATES':

We as terminal would point out that our liability for the product(s) delivered ends at ships railing so that we cannot be held liable if, after leaving our pipelines the quality of the product(s) delivered should prove to differ from that of the samples taken by us at the end of our pipelines as a result of any circumstances arisen or brought about in any way and any place what-so-ever on board the vessel.

SNC-Moerdijk loadingmaster will not sign a clean tank certificate. If appropriate and necessary master will issue a letter of protest.SNC-Moerdijk loadingmaster will not sign a dry (empty) tank certificate. If appropriate and necessary master will issue a letter of protest.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 23 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

#### 10.5 HANDLING OF SHIP'S STORE AND SPARE GEAR:

Loading stores is prohibited for:

• Chemical tankers: during open washing of dangerous goods, except that discharging slops necessary for discharging washing water is allowed.

Ship's stores can be ordered via your agent. Stores over land should be reported to the Port Facility Security Officer of the port facility via agent.

Intended store supply of a ship to be communicated to our waterfront planning section a day before the expected arrival of the vessel. Information should include projected duration of stores delivery.

#### 10.6 CRAFT ALONGSIDE:

The terminal will accommodate seagoing vessels to take bunkers/slops and stores alongside our jetties.

Conform the applicable Rotterdam harbour rules in the <u>Havenreglement Gevaarlijke Stoffen Rotterdam</u> and the requirements mentioned in ISGOTT chapter 2.3.6.1 & 25 1.4.6.1 & 24 and knowleged by SCE jetty planning, this is only possible under the following conditions:

Intended /storing of a ship are communicated to our waterfront planning section a day before the expected arrival of the vessel. Information should include projected duration of bunkers/stores.

Only GMAS registered and approved bunker barges are allowed

Shell reserves the right to refuse bunkers/stores alongside their jetties that take more than 3 hours.

Storing or bunkering of a ship takes place directly on arrival or after completion/suspension of cargo transfer.

Permission is incorporated in our Loading and discharging arrangement.

The loadingmaster can deviate from above rules i.e. agree, agreement to be incorporated in the loading & discharging arrangement, that the ship takes bunkers or stores. But only when:

Transfer of liquids F1 package group III (Flashpoint above 23 degrees C) and if it is not class 6 (toxic)

Cargo operations are limited to purging with nitrogen of gasfree tested cargo tanks.

#### 10.7 GARBAGE RECEPTION FACILITIES:

Domestic garbage and other ships garbage may not be dumped in de Terminals waste containers but must be transported by a, by port autorities recognized, waste collecting firm.

#### **10.8 POTABLE WATER:**

In general, you will order supplies of potable water before arrival via your agent. Your agent will arrange that the water barge arrives at the right time. If you are in port, you can order water supplies either directly or via you agent.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 24 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

#### 10.9 BUNKERS AND LUBRICATING OILS:

The terminal will accomodate seagoing vessels to take bunkers/slops and stores alongside our jetties. Special attention is required to the dangers of H2S in bunkerfuel conform ISGOTT chapter 2.3.6., 2.3.6.1 till 2.3.6.7 and 2.7.5 1.4.6, 1.4.6.1 till 1.4.6.6.

Conform the applicable Rotterdam harbour rules in the <u>Havenreglement Gevaarlijke Stoffen Rotterdam</u> and the requirements mentioned in ISGOTT chapter 2.3.6.1 & 25 1.4.6.1 & 24 and knowleged by SCE jetty planning, this is only possible under the following conditions:

Intended Bunkering/storing of a ship are communicated to our waterfront planning section a day before the expected arrival of the vessel. Information should include projected duration of bunkers/stores.

Only GMAS registered and approved bunker barges are allowed

Shell reserves the right to refuse bunkers/stores alongside their jetties that take more than 3 hours.

Bunkering of a ship takes place directly on arrival or after completion/suspension of cargo transfer.

Bunkering of gascarriers is only allowed when loadingarms are disconnected.

Permission is incorporated in our Loading and discharging arrangement.

The master and skipper of the vessels involved have filled out and signed the bunker control checklist prior to bunkering. They should ascertain and agree in writing about:

- Capacity, free space in m<sup>3</sup> and filling degree of tanks to be filled.
- Means of communication and procedure.
- Frequency of dipping bunker tanks in minutes and person responsible.
- Who keeps watch and acts on malfunctions.
- Use of an emergency stop and procedure.

#### 10.9.1 Exceptions to the discretion of the loading master

The loadingmaster can deviate from above rules i.e. agree, agreement to be incorporated in the loading & discharging arrangement, that the ship takes bunkers or stores. But only when:

Transfer of liquids F1 package group III (Flashpoint above 23 degrees C) and if it is not class 6 (toxic)

Cargo operations are limited to purging with nitrogen of gasfree tested cargo tanks.

#### 10.9.2 Bunkering is prohibited during:

Taking bunkers and provisions alongside our jetties is prohibited during:

Loading-discharging of products mentioned in the Gas Carrier Code. For SNC: Propyleenoxide, Butadieen, Propylene, Ethylene, LPG C4, Crude C4 (check for other products the IGC code 1993 edition).

Transfer of low flashpoint cargo products .

Loading/discharging of a chapter 15 product from the IBC-code

#### 10.10 SLOPS AND BALLAST RECEPTION FACILITIES:

#### PORT RECEPTION FACILITIES FOR SHIP-GENERATED WASTE AND CARGO RESIDUES

In accordance with MARPOL 73/78 and EU-directive 200/59/EG, ports are obliged to ensure port reception facilities for the reception of residues of oil and noxious liquid substances and of garbage, adequate to meet the needs of ships using them, without delay to these ships. Complying with these regulations the Port has designated a number of

companies which are entitled to collect or receive and process (harmful) waste from ships.

Reception companies collect waste against set tariffs, which may be obtained from these

companies via the shipping agent. Collecting waste may take place by means of barges. Ships are being discharged under "NUOC" (Not Under Operational Control SCE/SNC). Ballast water is not part of environment permit system S.N.C.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 25 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

#### **10.11 LOADING & DISCHARGING AGREEMENT:**

Per product a procedure for operations must be agreed. The loading master will come on board to agree and record the agreed procedure(s). 1 copy will be issued for reference to the vessel and 1 copy will be retained by the loading master. Any change of procedure whether shore or ship based must be recorded and agreed upon. When deviations, on the agreed procedure are observed, cargo operations should be suspended immediately until agreement is reached and recorded. Violation of this rule will be regarded an unsafe act.

#### **10.12 ADDITIONAL DANGEROUS PRODUCT INSTRUCTION:**

Per product to be loaded the vessel will receive from our shore representative a relevant and current Material Safety Data Sheet (MSDS) prior to loading. Please communicate the information incorporated in these MSDS to all crew.

If products handled constitute a risk that is extraordinary compared to generally handled cargoes, Shell will issue you an additional dangerous product instruction. Herein additional instructions are given for both ship and shore. These instructions are an integral part of the loading and discharging agreement.

#### **10.13 STATIC ELECTRICITY:**

Static electricity presents fire and explosion hazards during the handling of petroleum, and several chemicals. Certain operations can give rise to accumulations of electric charge, which may be released suddenly in electrostatic discharges with sufficient energy to ignite flammable gas/air mixtures.

There is no risk of ignition unless a flammable mixture is present.

#### 10.14 IF A FLAMMABLE MIXTURE IS PRESENT THEN:

The flow of liquids never to exceed 1 m/sec till level of liquid is 30 cm above opening of the loading line, this to avoid the dangerous splash filling. When bottom structure is covered and after all splashing and surface turbulence has ceased, the rate can be increased until a maximum velocity of 7 m/s.

If the standard loading rate exceeds the velocity of 1 m/s, open more tanks, or limit initial liquid flow speed during start loading and at switching tanks. When start loading with more than 4 ships tanks open, the cargo will not flow into all tanks simultaneously so the initial rate must not exceed the maximum of 4 tanks. Reference table: diameter of transfer lines x number of tanks = max. Initial loading speed

Diameter	1	2	3	4
4"	30	60	85	120
6"	65	130	200	260
8"	120	240	350	460

#### **10.15 EMPTYING LINES**

Only Nitrogen is to be used when emptying lines.

#### Use of compressed air is for safety reasons strictly forbidden!!

#### **10.16 SAMPLING POLICY**

If applicable: Agent, Owner and/or customer is responsible for instructing the appointed surveyor on time for actual ETB at loading site . Surveyor needs to be nominated and released for our loading sites by nomination process. Loading operations won't be delayed due to waiting for surveyor.

#### Sampling end of shore line is not allowed at Shell Moerdijk

Moerdijk is not able to take product samples at the last installed flange. There is for toxic cargo vapors no release to a safe location, causing non-compliance with local environmental legislation. Product is sold on basis of analysis reports of the product in the shore tank. At Moerdijk dedicated lines are used from shore tank to jetty loading arm.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 26 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

#### Discharging tankers: sampling of incoming product is not allowed at Moerdijk

In case receivers of the cargo have any doubt on specifications or analysis results, additional sampling needs to be conducted outside Shell Moerdijk.

#### Loading tankers: sampling of outgoing product

Moerdijk has the obligation to minimalize vapor release to air for "substances of very high concern". Closed sampling of toxic and flammable cargo is a Shell Chemicals Terminal HSE and ADN requirement for inland barges. Closed Sampling for seagoing tankers is a Shell Chemicals Terminal HSE, International Bulk Chemical code and tanker safety guide requirement

- For products that imposes a safety hazard such as toxic and flammable products (i.e. Butadiene, Propylene Oxide, Styrene Monomer, Benzene >0,1%) only Closed Sampling\* is allowed, in combination with appropriate PPE
- Non-toxic products preferred sampling by closed system

\*Closed Sampling for Moerdijk means a system that can take samples from a closed line system that circulates the product (for example DOPAK) or Gas Sampling Bombes.

#### **10.17 INHIBITOR DOSING AT MOERDIJK**

#### Inhibitor dosing is not allowed at Shell Moerdijk jetties

Inhibitor is dosed at the production location before it enters the shore tank. Adding additional inhibitor for voyages exceeding 4 weeks needs to be requested at nomination date to Shell Chemicals Europe BV local supply and commercial counterpart.

#### 10.18 DEPARTURE / ORDERING PILOT & BOATMEN:

As soon as cargo transfer is finished, we will notify ships agent to order the pilot (incl. tugs and boatmen). We use following guidelines for departure:

After loading: end of cargo transfer + 2 hours

After discharging: end of cargo transfer + 1.5 hours

In this time we will complete cargo calculations and cargo documents. If you choose to order the pilot yourself for an earlier moment, we can and will not guarantee that transport documents will be ready. Any delay within this period will be for your account.

These guidelines are experience based and are necessary to give all parties involved the opportunity to execute their activities safely and accurately. Deviation from these guidelines is only possible by mutual agreement between the loading master and the master/skipper of the vessel involved.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 27 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

# **11 SAFETY REQUIREMENTS:**

#### 11.1 SMOKING:

It is not allowed to smoke in the harbour area except in accommodations on board designated and clearly marked as such. With this letter we draw your special attention to the ship/shore safety checklist item **B 36** (smoking requirements) and its explanatory guideline

We herewith clearly point out that violation of these smoking regulations, by any person on board, may result in suspension or stoppage of operations, for which delay we cannot be held responsible.

#### SMOKING IS ONLY ALLOWED IN DESIGNATED "SMOKING ROOMS"

A designated "smoking room":

- MUST have a two (2) door seperation with the outside.
- MUST be stated in the ship/shore safety checklist.
- MUST be marked as such Places designated as "smoking room" loose this qualification as soon as either the outside door or the smoking room door can not be closed properly anymore.

See ISGOTT chapter 4.2 4.10 "SMOKING"

#### 11.2 USE OF MATCHES AND LIGHTERS:

Safety matches or fixed (car type) electrical cigarette lighters should be provided in approved smoking locations.

All matches used on board tankers should be of the safety type. The use of matches and cigarette lighters outside the accommodation should be prohibited, except in places where smoking is permitted. Matches should not be carried on the tank deck or in any other place where petroleum gas may be present. The use of all mechanical lighters and portable lighters with electrical ignition sources should be prohibited on board tankers.

Disposable lighters present a significant risk as an uncontrolled ignition source. The unprotected nature of their spark producing mechanism allows them to be easily activated accidentally. The carriage of matches and lighters through terminals should be prohibited.

#### 11.3 MANAGING SHIP-/SHORE INTERFACE:

Shell Nederland Chemie has a firm intent to manage the ship- shore interface to a high standard with respect to Health, Safety and Environment. In order to achieve this, we gather data about HSE-performances of ships we charter and of our own HSE-performance. This data will be analysed and communicated back to our transport partners and our own Shell community. If data is actionable we ourselves will implement improvements and will propose opportunities for improvement to our shipping partners.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 28 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

#### 11.4 HSE LETTERS OF PROTEST:

By these letters we will inform you about breaches of accepted HSE standards observed on board of your vessel. If these breaches jeopardize the safety of our installation or staff we will suspend operations immediately until you have remedied matters to acceptable standards. We hold you accountable for any loss of lay time that may arise. Copies of these letters will be sent to the ship's agent and ship's owner. Periodically we will meet with your company to discuss our findings. This data will also be used in our supplier ranking.

#### 11.5 TERMINAL EVALUATION BY SHIP:

To acquire information of our own HSE-performance we can, randomly, request you to fill out a so called "HSEevaluation form for Terminal activities at Moerdijk. In this document you can rate the terminal's performance and facilities. We ask you to be frank and illuminate your score by relevant comments. Thanks in advance for your cooperation.

#### 11.6 ACCESS TO SHIP & CLEANLINESS SHIPS DECK:

In order to prevent personal incidents like falling and slipping, the ships deck must be clean and free of obstacles. Means to access the deck from the shore should be sturdy and immobilized and offer support to maintain balance (preferably a handrail along the stairs).

#### 11.7 ENTERING ENCLOSED SPACES:

Enclosed space entry, including cargo tank entry for cleanliness inspection, is prohibited at Shell Moerdijk as per site HSE regulations.

#### 11.8 INSPECTION AND/OR DIVING ALONGSIDE JETTIES:

Diving alongside Shell Moerdijk jetties is for safety reasons not allowed. In case of emergency always contact the loading master.

#### 11.9 DRUG AND ALCOHOL POLICY:



Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 29 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

#### 11.10 PORTABLE ELECTRICAL EQUIPMENT, INCLUDING PHONES AND PAGERS:

Use of electronic devices (such as: camera's, telephones, pagers, lap top computers, transistor radio's etc.) are strictly forbidden in the harbour area except in designated approved smoking rooms and galleys on board. These devices must be switched off within jetty, loading area's and plants.

#### Remark:

Shell approved persons may use an Ex-proof GSM cellular phone.

Because dock facilities are typically rated as a hazardous area and act as an entrance gate for ship personnel, pilots and government officials to and from the ships it's allowed to take non-intrinsically safe ATEX equipment to and from a ship under the following conditions:

- Turn device(s) always OFF when entering the jetty.
- Secure device always in a bag (e.g. a bag that protects the device from breaking in the event of a fall such as a backpack, a laptop case, a lunch box, etc, etc,)

#### **11.11 ENVIRONMENTAL PROTECTION:**

The rules and regulations in the port contribute to the safe, efficient and environmentally responsible handling of shipping traffic. The international rules of the IMO, such as the SOLAS convention and its amendments (e.g. the IMDG code and IBC) and national regulations, including the recommendations of the European Community, are in force in the port of Rotterdam. Furthermore, the Port Bye-laws are the "house rules" of the port.

Based on the Rotterdam Port Bye-laws, the Port Rules on dangerous substances contain additional, specific regulations for ships carrying dangerous cargoes in the port.

#### 11.12 ELECTRICAL STORMS:

All cargo transfer operations, including the ballasting of non-gas-free cargo tanks will be stopped in the event of an approaching electrical storm. All tank openings, vent outlets, cargo and manifold valves will be closed until such time as the storm has passed.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 30 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

# 12 APPLICABLE TERMINAL REGULATIONS:

LIFE SAVING RULES (Moerdijk Jetty and facility)

# These rules must be followed allways at Shell-facilities and Jetties.

Obtain authorise	ation before entering a confined space	
	pard must be reported in advance to the	Protect yourself against a fall when working at height         You should         • Have authorisation to work at height outside a protective environment         • Be aware of what fall protection equipment to use and how to use it         • Check equipment before using it         • Always tie off when at height outside of a protective environment
Do not walk und	ler a suspended load	Do not smoke outside designated smoking areas
You should	<ul> <li>Never cross a barrier controlling an area with a suspended load without authorisation</li> <li>Follow the instructions of the Flagman or the Person in Charge of the lift</li> <li>A Person in Charge should</li> <li>Mark the unsafe area and put barriers in place</li> <li>Ensure that nobody walks under a suspended load</li> </ul>	You should Know where the designated smoking areas are Intervene if you see someone smoking outside a designated area
No alcohol or di	rugs while working <mark>or driving</mark>	While driving, do not use your phone and do not exceed speed limits ( 30 Km at Moerdijk Facility )
You should	<ul> <li>Always inform your Supervisor or the Person in Charge if you are taking medicine that may have an effect on your performance</li> <li>If in doubt, always check with your Supervisor or the Person in Charge who may seek medical advice</li> <li>Not use, keep, sell or distribute illegal drugs</li> <li>Intervene if you see a case of alcohol or drugs abuse</li> </ul>	Drivers should       • Not use a mobile phone or pager, send or read a text message, or use a hands-free mobile phone device         • Stay at or below the maximum allowable speed for the road your are driving on as indicated by road signs or Journey Management instructions         • Stay at or below the maximum allowable speed limit for the vehicle you are driving         • Adjust your speed to the prevailing conditions         • Adjust use a 3-point seatbelt

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 31 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

#### 12.1 ULLAGING AND SAMPLING:

During loading and for 30 minutes after the completion of loading (relaxation-time) no equipment for dipping or ullaging may be introduced into the tank.

Portable gauging devices mounted on deck standpipes such as UTI's and operations through correctly designed and installed sounding pipes - pipe which extends to the full depth of the tank - are allowed.

#### 12.2 CLOSED OPERATIONS:

The loading, discharging and/or ballasting of ship's cargo tanks must be conducted under closed conditions. The use of manual gauging/sampling of cargo tanks via sighting, ullage ports or similar openings is not permitted. Cargo tank inspection from deck level is only allowed when loading arm is not connected and tanks are clean, gasfree and not inerted.

In case of exceptions e.g. Claim Procedure, then a MOC (process) is required.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 32 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

#### 12.3 INERT GAS:

When loading products that are poisonous, flammable or require a low oxygen atmosphere above the product we will purge the cargotanks with pure nitrogen. To prevent people entering these cargo tanks during and after purging, all possible entrances must be closed and secured. On all lids and hatches big enough to allow entrance to the cargo tank by people, nitrogen warning labels must be visibly attached. Vapours displaced from the ship during loading of these products are recovered or incinerated.

#### 12.3.1 Nitrogen supply above flammable liquids during discharging

In order to prevent the build up of an explosive atmosphere in the ships tanks during the discharging of flammable products, we will replace, via the vapour return line, the discharged product by nitrogen. The pressure of the nitrogen supplied is standard set to 20 mbarg, can/will be increased on ship's request.

To prevent people entering these cargo tanks during and after purging, all possible entrances must be closed and secured. On all lids and hatches big enough to allow entrance to the cargo tank by people, nitrogen warning labels must be visibly attached.

### 12.4 STATE OF READINESS OF MAIN ENGINES:

The main engines and other essential machinery of all ships alongside must be maintained in a state of readiness for vacating the berth at short notice.

#### 12.5 MAINTENANCE AND REPAIR WORK ONBOARD:

Major planned repair work is not permitted while the ship is alongside the Shell Moerdijk Berth. Emergency repairs, namely essential repairs needed to rectify malfunctioning equipment and prevent hazardous or unsafe conditions, will be permitted on a case-by-case basis following upon application to the Harbor Master and with the permission of the Terminal Representative.

#### 12.6 HOT WORK ON BOARD:

Hot work outside a designated space is not permitted on board ships alongside the Moerdijk Berth

#### 12.7 TANK CLEANING, PURGING AND GAS FREEING:

During ships stay at the Shell Moerdijk jetties, all commercial cleaning operations are prohibited. Mandatory MARPOL ANNEX II Pre Wash may be allowed (see 12.7.1.2). If additional information is required before arrival, please contact your local agent or Shell Moerdijk directly.

#### 12.7.1 PRE WASH

#### 12.7.1.1 MARPOL Annex I:

Not allowed

#### 12.7.1.2 MARPOL Annex II:

An Annex II pre-wash may only be allowed if the pre-wash is mandatory, required by authorities and the product has been discharged at a Shell Moerdijk jetty. Operations will have to be in compliance with Terminal HSE requirements, ISGOTT and tanker P&A manual.

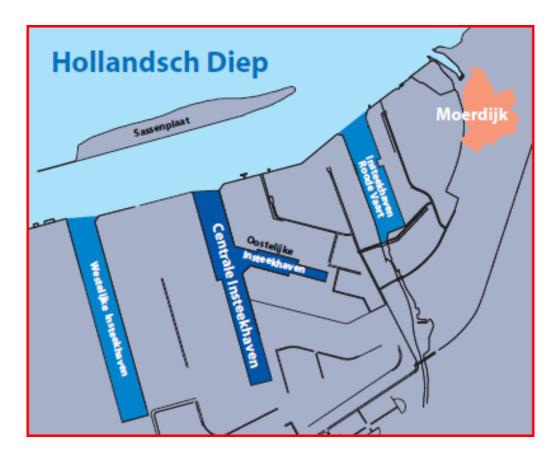
A mandatory Pre Wash is only allowed if the O2 content in tank atmosphere is < 8%. This has to be confirmed during the pre-cargo operations meeting by the master and/or cargo officer. Pre-wash is not allowed in a non inert atmosphere. Troughout the operation the tank atmosphere has to be safe to carryout high pressure washing. The pre-wash operation may only be fully closed; portable butterwash machines are not allowed. At Shell Moerdijk pre wash cargoes are discharged under positive N2 pressure via VR.

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 33 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

# 13 APPENDIX A: CONTACT LIST:

	telephone	opening hours
SCE-Jetty Planning	+31104416285	Standard office hours.
Chemical.marine.jettyplanning@shell.com	+31104416288	
Loading master Moerdijk	+31168355189	24 hours
(for operational matters only)		
Harbor number:	M450	
Visiting address	Chemieweg 25 4782SJ Moerdijk	
PFSO - W. Groenendijk	+31168355387	Standard office hours
(Port Facility Security Officer)		
Deputy PFSO	+31168355345	24 hours
MTA SNC D. Yigit	<mark>+31104415042</mark>	Standard office hours

# 14 APPENDIX B: PLAN OF PORT LAYOUT



Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 34 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03

# 15 APPENDIX C: PLAN OF BERTH LAYOUT



# **16 APPENDIX D: MOORING PLANS**

https://snr-bbs.nl/port-information-mooring-plans/

Filenaam: BBS MFD 03.3630	Rev.: B.9	Inhoudelijk beheer: DMS/91F13	Pagina: 35 van 35
Terminal Information Booklet		Eigenaar (SPO): DMS/91F1	Niveau: 03