

OPERATING REGULATIONS

FOR THE ENERGY PORT IN GOTHENBURG



The Operating Regulations for Gothenburg Energy Port are divided into three parts: Joint Procedures, Procedures for Vessels and Operating Practices for Businesses within the Energy Port (shore-based activities). Everyone concerned is obligated to know the contents of all the parts, including those parts that do not concern them directly. Following the Operating Regulations for Gothenburg Energy Port does not exempt anyone from responsibility for complying with the General Port Regulations for the Port of Gothenburg.

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A – Joint procedures

1. General

The Operating Regulations for Gothenburg Energy Port are divided into three parts: joint procedures, procedures for vessels, and operating practices for businesses within the Energy Port (shore-based activities). Everyone concerned is obliged to know the contents of all the parts, including those parts that do not concern them directly. Following, the Operating Regulations for Gothenburg Energy Port does not exempt anyone from responsibility for complying with the General Port Regulations for the Port of Gothenburg.

1.1 Contact information

Primary contacts for the Energy Port are via our Port officers:

SKARVIK / RYA HARBOUR

Phone: +46 31 368 75 25 (24H)

VHF: CH 12

E-mail: oilharbouoperation@portgot.se

TOR HARBOUR

Phone: +46 31 368 75 30

VHF: CH 15/17

E-mail: torshammen@portgot.se

1.2 Responsibility for protection

All personnel working, temporarily or permanently, in the Energy Port must comply with the Port of Gothenburg's protection rules regarding safety, protection (security) and access to the Energy Port. A complete set of rules is available in the General Operating Regulations for the Port of Gothenburg. In addition, all personnel also have personal responsibility to comply with the regulations of protective clothing, see section 8. If any of the protection rules or regulations for protective clothing mentioned in these regulations is not followed, the port representative has the right to incur appropriate consequences accordingly.

1.3 Risk management

Crude oil, refined oil products, petroleum gases and chemical products are usually flammable and hazardous to health. Consequently, special attention is required to prevent personal injury or damage to property or the environment.

1.4 Knowledge and understanding of the regulations

All personnel working or present in the areas covered by the regulations, as well as all outside visitors to the Energy Port, should familiarize themselves with the rules and are obligated to follow the regulations. It is mandatory for all vessels calling the Energy Port to carry the latest

version of the Operating Regulations onboard, in printed or electronic version. These regulations are also available in Swedish.

1.5 Port representative

The term “port representative” at the Energy Port as used in these regulations, refers to the Head of Business Area Energy Operation, Operations Manager, Fire Engineer, Operational Planner or a Port officer according to the Port of Gothenburg’s organizational chart for the Energy Port.

1.6 ISGOTT

The Operating Regulations for the Energy Port are based on recommendations in the latest edition of “International Safety Guide for Oil Tankers and Terminals” (ISGOTT).

1.7 Establishing the regulations

The Head of Business Area Energy Operation in the Port of Gothenburg is responsible for establishing the regulations. The latest version can be found on www.portofgothenburg.com.

1.8 GDPR

Handling of personal data according to GDPR, see www.portofgothenburg.com.

1.9 Photo permit

With reference to the Act on Protective Objects, a photo permit is required to be able to photograph within the Energy Port. Photo permit is applied for at the harbour office by a port representative.

2. Geographical areas of application

2.1 Gothenburg Energy Port

The Operating Regulations apply within the areas of the Energy Port according to appendices A, B and C regarding Skarvik/Rya Harbours, Tor Harbour and berth 644 in Skandia Harbour.

2.2 Area belonging to St1 and Stena Oil

The relevant sections of these Operating Regulations apply to the private oil terminals owned by St1 (Färjestaden) and Stena Oil.

3. Safety

3.1 Safety procedures

The Port of Gothenburg's safety procedures are subject to the City of Gothenburg's safety policy. The Energy Port applies the following basic approach with regard to safety procedures:

- activities should be conducted in a way that promotes a sound work environment, a high level of safety and good quality
- everyone working in the Energy Port should be able to feel safe when carrying out their duties
- operations at the Energy Port should be characterized by innovative, discerning environmental work and concern for safety
- any and all work carried out ashore or onboard a vessel in the Energy Port must be in a drug and alcohol-free work environment
- companies handling flammable, dangerous or hazardous goods within the Energy Port's premises must maintain continuous watch, at least every two hours, during cargo handling
 - at all other times, pipeline inspection shall be conducted every four hours according to inspection points
 - any exceptions must be approved by the Head of Business Area Energy Operation or Operations manager at the Energy Port
 - inspection procedures and performer must be approved by Gothenburg Port Authority

Cooperation between companies and the Energy Port on safety issues should always be with the purpose of achieving sound and financially beneficial solutions. All safety precautions with regard to port security are stipulated in the Port of Gothenburg's security plan. More information is available on www.portofgothenburg.com

Inspection of own facilities and areas must be conducted at least twice every 24 hours.

3.2 Traffic

In the Energy Port the speed limit is 40 km/h if not stated otherwise. Vehicles going out on any of the harbour's berths must contact the port representative for approval. In the case of road work to be carried out in the Energy Port, TA-plans must be submitted to the Harbour office and approved by a port representative. Unless traffic rules within the Energy Port are followed, the port representative has the right to revoke access to the Energy Port.

3.2.1 Sobriety check at Gate 1

Sobriety check may occur upon entry into the Energy Port and the maximum blood alcohol limit is 0.2 mg/ml for passage.

3.3 Companies' responsibility

Company management and company representatives working at the Energy Port must ensure that:

- delegation is organisationally appropriate and correct in accordance with current legislation
- training of the company's personnel is in accordance with current legislation, and that the terms and conditions stated by the Energy Port are met and that training in general is appropriate for the work at hand
- signs and instructions are to be designed in such a way that they can be clearly understood even by non-Swedish speakers

3.4 Personnel's responsibility

All personnel working in the Energy Port are personally responsible for ensuring that regulations, instructions and generally accepted recommendations are followed, and that protective clothing and equipment are used as stipulated.

3.5 Consequences of violation

In the area of the Energy Port all must comply with the Operating Regulations. If they are not followed the port representative have the right to issue justified consequence. Violation of rules is considered unacceptable and especially in violations that jeopardise fire safety, for example when working in the Energy Port or when smoking.

In the event of a violation occurring, port representatives will photograph the access card and ID card as well as contact the employer. At a significant violation or when smoking, but also in case of repeated minor violations, the access card will immediately be withdrawn. The Operations manager in the Energy Port will, as a consequence for any or repeated violations, if the primary consequence has not been paid any attention, decide on further actions.

3.5.1 Smoking

Smoking is only permitted in designated smoking areas, in case of violation the access card will be revoked indefinitely.

3.5.2 Significant violation while working in the Energy Port

When working without a valid work permit or alternatively having a work permit for cold work but performing hot work, the work will be stopped immediately, and no new work permits will be issued until further notice. The port representative carries out justified consequences immediately by revoking access cards and informs the Operations manager who will decide on further actions afterwards.

3.5.3 Minor violation while working in the Energy Port

When working within the Energy Port where the right protective equipment, clothing or other equipment required by the work permit, is not used an oral warning will be given. In case of repeated violations, the access card will be withdrawn for two weeks.

4. Access to the Energy Port

4.1 General

All persons seeking access to the Port of Gothenburg's port facilities, including the area of the terminal operators, are covered by the following regulations and laws: the European Community (EC) regulation 725/2004 (Maritime Security Act), EU Directive 65/2005 (Port Security), Authorised Economic Operator (AEO) and the Swedish Civil Security Act. In order to gain access to the port facilities authorisation is needed. This also applies to vehicles and goods to be taken into the port facility.

4.2 Access criteria

The requirement to gain access to the Port of Gothenburg's port facilities is that you are pre-registered or hold a personal access card. If you are pre-registered, the basic requirement is that you must be able to identify yourself with a valid SIS approved identity document, national identity card or passport. If identity cannot be verified with approved identification document or if the recipient inside the port facility can't verify the visit, access shall be denied according to ISPS.

In order to obtain a personal access card, certain requirements must be met; either be employed by Port of Gothenburg or in one of the terminals or perform work in the Energy port with a regularity of at least once a week for a period of one month or longer.

Visitors should be granted access based on the following rules:

- all who are granted access are required to take note of and follow Gothenburg Port's safety rules and instructions
- all who are granted access shall be responsible for ensuring that any fellow passengers in the vehicle upon entry are authorised, all passengers in the car shall register their access card or be registered as a visitor at the gate
- all who are granted access shall, at the request of the security guard, guardian and/or PFSO/PSO/Security Officer, present a valid SIS approved identification, or passport
- all who apply for access to the port facilities of the Port of Gothenburg shall, on request by the security guard, allow the inspection and control of vehicles, goods and goods carried. If this is not allowed, you will be asked to leave the facilities
- the persons who obtain an access card are responsible for this as a personal value document, which must not be handed over to another person or lent. In case of loss of

access card, this must be reported immediately to Gate 1 or the access card administrator at Port Entry.

4.3 Responsible safety person/officer

Operations in the Port of Gothenburg are dependent on that suppliers, subcontractors, tenants, consultants and project managers enter the port facility on their own in an approved and secure manner. This is independent of whether they work for a terminal operator directly or work at an external company located in the terminal area.

A Security Officer has the right to pre-register visitors to the port and can apply for permission in the EastCoast visit.

On the Port of Gothenburg's website under E-services, www.portofgothenburg.com there is an application called "Application form for personal access to the Energy Port" which when completed is sent for endorsement to the Energy Port's PFSO, who signs it and forward it to the card administration for documentation.

For projects, temporary Security Officers can be appointed who have the right to pre-register people during the project.

4.4 Terms and conditions regarding access cards

Every cardholder who applies for an access card must read through and take note of the terms of the access card (all conditions are on the application form). Through the cardholder's quittance the person concerned acknowledge the terms and conditions of the access card.

Application forms can be found on the Port of Gothenburg's website or at the access card administration, Port Entry, and also in Gate 1.

4.5 Access Card Administration

The access card administration is located in the ground floor of Port Entry and is manned Monday–Friday between 08:30 – 16:00, but closed for lunch between 12:00 – 13:00.

5. Environmental responsibility

The Port of Gothenburg has a permit from the Västra Götaland County Administrative Board, in accordance with the Environmental Code, for harbour operations at Tor Harbour, berth 644 at Skandia Harbour, Skarvik Harbour and Rya Harbour. Storage and handling of oil, gas and chemical substances always involve risks of spillage into the surroundings. The Energy Port applies the following basic approach with regard to its environmental policy:

- storing and handling of oil, gas and chemical substances should be carried out in such a way as to minimise the risk of spillage. The best available technology and practices should always be applied

- all companies operating in the Energy Port are responsible for internal training on environmental hazards and on the appropriate handling of equipment, for the purpose of minimizing these risks
- loaded tank vehicles may not be parked on surfaces with a higher permeability than asphalt (approved surfaces are e.g. asphalt, concrete and steel)
- damage to land and the environment must be reported to the County Administrative Board or the Environmental Department by those responsible for the damage, in accordance with the current environmental inspection programme
- cargo with a flashpoint below 30 degrees Celsius, and other products or substances that may obstruct the purification of oil contaminated wastewater should never be discharged into the Oil Contaminated Wastewater System
- single-hull vessels are not allowed to operate in the Energy Port (effective from January 1, 2015)
- contact the environmental engineer at the Energy Port for any questions regarding pressure test of cisterns

6. Smoking prohibited

A general ban on smoking and on the use of open flames applies throughout the Energy Port, ashore as well as onboard vessels, and inside vehicles. Smoking is only permitted in designated smoking areas and failure to follow instructions may be sanctioned in accordance with section 3.5.1.

7. Deviations

Injuries, incidents and near misses must be reported as deviations of importance to activities within the Energy Port. Such deviations shall be dealt with by the cooperation committee and a designated project team, with the purpose of reducing the number of injuries and incidents. Deviations are reported in Port of Gothenburg's deviation management system TRIA, www.portofgothenburg.com – E-services.

8. Protective clothing

8.1 Regulations and area of application

The following applies when working with a work permit or conducting supervision anywhere within the Energy Port:

- safety helmets must always be worn

- goggles or a visor and hearing protectors must always be easily accessible and must be worn in hazardous environments, e.g. when opening a pipeline, in pump stations, along pipelines, on berths during cargo operation, etc.
- coveralls and protective shoes must always be worn, and a visible item of clothing should be of reflective material
- when working outside in the Energy Port, primarily berths and p-stations, work clothes must be flame-proof and comply with reflective safety regulations, in some operations this can be supplemented with a reflective safety vest if necessary
- antistatic treated clothing is recommended within the Energy Port

If any of the above is missing, the port representative on duty has the right to suspend work immediately until the matter has been rectified.

8.1.1 Visitors

Visitors to a berth within the Energy Port are recommended to wear a helmet, reflective vest, protective clothing and shoes.

8.2 Helmet colours

Jetty- and pipeline operators must wear orange helmets. The Port of Gothenburg operates under the following rules, and recommends that other companies do likewise:

- management representatives and general supervisors wear yellow helmets
- safety representatives wear red helmets
- visitors wear blue helmets
- everyone else wear white helmets

8.3 Life jackets

Life jackets, controlled and approved, must be worn when working on berths and piers or where there is a risk of falling into the water. This applies throughout the Energy Port. If a life jacket is missing, the port representative on duty has the right to suspend work immediately until the matter has been rectified. When welding is conducted, life jackets with spark protection should be worn.

8.4 Other protective equipment

When handling oil, gas or chemical substances that require additional protective equipment as mentioned in 8.1 and 8.3, the company responsible for the workplace must use or have protective equipment available as directed by the authorities or recommended in the PDS/MSDS (Product Data Sheet/Material Safety Data Sheet). When handling process equipment, compliance with the Occupational Safety and Health act must be followed. Protective equipment when handling LNG, see separate LNG Operating Regulations at www.portofgothenburg.com – Operations – Rules and permits.

9. Use and inspection of insulating flanges

9.1 General conditions

Insulating flanges should be used for ship to shore connections when handling flammable cargo. Electrically non-conducting hoses may be used as an alternative to insulating flanges. The same rules apply for insulation measurement and intervals as for insulating flanges. Non-conducting hoses should be clearly marked with relevant details so as not to be confused with conducting hoses. The standard requirements for insulating flanges also apply to gas return hoses and pipes.

9.2 Functional inspection

The insulation resistance should be inspected and tested periodically or at least once a year, and records kept. The measured value of the resistance should not be less than 1,000 ohms. The measuring voltage should exceed 100 volts. If the resistance is lower, the hose or arm should not be connected. Poor or non-existent insulation of an insulating flange should be reported immediately to the responsible terminal representative in the case of equipment belonging to individual depots or companies in the Energy Port, or to the port representative if the equipment belongs to Port of Gothenburg. After being informed of defective equipment, the company must attend to the matter as soon as possible.

10. General arrangement for berths

The general arrangement for berths, published on www.portofgothenburg.com – Operations – Berth specifications, gives detailed mooring recommendations, maximum dimensions for vessels for each berth as well as other restrictions concerning berths in the Energy Port. These documents are equally as valid as the Operating Regulations for the Energy Port and are on par with them.

10.1 Emergency escape plans

The general arrangement as stated above also comprises an updated emergency escape plan for each berth. Each berth has at least two emergency escape routes.

10.2 Ship/shore access

A safe gangway access between ship and shore shall be used by all operators, see AFS 2001:9 §11 and ISGOTT chapter 16.4. The gangway shall be regularly checked in accordance with the restrictions set for each individual gangway with respect to the applicable angle.

B – Procedures for vessels

11. General procedures for vessels

11.1 Notification of arrival

Vessels arriving at Port of Gothenburg must report to the Port Authority/Port Control in accordance with the General Port Regulations. According to these regulations, hazardous goods being brought into the port area by sea must also be reported. All vessels must declare the three last cargoes carried prior to arriving in the port.

11.2 Ventilation vapours from tanks

Vessels where the last cargo carried contained high levels of hydrogen sulphide (H₂S) and/or mercaptans must declare the levels of these components in the tank atmosphere no later than 12 hours before arrival. When loading products, the following maximum levels apply; for H₂S, 100 ppm, and for mercaptans, 5 ppm; both levels refer to the gaseous phase. When handling products with high level of H₂S or mercaptans, appropriate protection equipment must be used/worn. The vapour return unit, if available, should always be used during loading operations.

In the case where a vessel has entered the port for discharge and will continuously start backloading, i.e. loading immediately after discharge, the cargo tanks need to be measured by an independent surveyor. The measurement only needs to be conducted if the limits have been higher than allowed. This to ensure that the limits for mercaptan and H₂S have not been exceeded.

On arrival in the port, any overpressure in cargo tanks must be reduced to normal atmospheric pressure in order to carry out measurement operations. The previous is also in affect for the measurement operations carried out after discharge in order for the port to grant permission to load. If these rules are not followed there is a risk of being shifted from berth to anchorage for venting and for the order of priority to be lost. The shipping company shall bear all costs incurred in connection with sampling, analyses and any possible movement to anchorage area.

11.3 Order of priority to berth

Provided that notice of arrival has been in accordance with applicable port regulations, the order of priority is determined based on the vessel's arrival at the traffic area, or the designated anchorages, or by submitting a "Virtual Time of Arrival" (VTA), hence being a "Just-in-Time" (JIT) Port Call. A "Notice of Readiness" (NOR) must have been submitted in accordance with charter party. Arrival at the traffic area means arriving by sea (entering Gothenburg VTS area) or arriving from Göta River (entering from Lärje). If the ship has not taken advantage of its turn in the queue within 6 hours of having been allocated a berth, the berth will be allocated to the next ship in turn.

Exemptions: Head of Operations or an appointed representative may deviate from the order of priority if a request has been made to be granted priority and it is supported by special circumstances. Special circumstances may be considered to exist if there is a threat of interruption in production owing to the stock situation of a product, or that there is a specially designated mooring berth for a particular vessel.

Vessels may not be idle at a berth without special permission. Ships that, for reasons beyond the control of the Energy Port, remain idle at a berth for a long period of time (more than 6 hours before, during or after cargo operation commence), can be ordered to move from the berth. This after discussions between the responsible terminal representative, Energy Port management and the master of the vessel. The master of the vessel is responsible for arranging pilot and/or tug assistance if such is needed to depart from the berth. Vessels ordered to move from a berth as mentioned will be placed in order of priority after having submitted a new NOR and when the vessel is ready for cargo handling.

Vessels that, after having loaded and/or discharged cargo at the Energy Port, for reasons beyond control of the Energy port, request to return to a berth, will be placed on the order of priority list accordingly, no new NOR is required. The vessel will be assigned an anchorage or waiting berth pending a vacant berth.

In the Energy Port where there is a risk of conflict between berths, there must be a safety distance between vessels which refers to 10% of the larger vessel's LOA.

11.3.1 Scenarios concerning order of priority to berth

1. When two or more vessels compete in getting first to a specific berth, the vessel that arrives first in the Gothenburg VTS area will obtain the right to proceed into the berth and is thus first in order of priority. A presumption is that the vessels competing are ready to load and that the terminal is ready to start a cargo operation.
2. A vessel that has loaded or discharged cargo and are going to another berth afterwards has two options concerning order of priority:
 - a. If the vessel after finished loading/discharging, has disconnected the arms/hoses and after that is ready to load/discharge at the next berth. Port of Gothenburg will consider that the vessel has the right to tender a "Notice of Readiness" (NOR), and thereby put itself in order of priority to the specific berth.
 - b. If the vessel after finished discharging needs to proceed to anchorage to execute tank washing and/or ventilate the tanks, the ship is not considered to be load ready. Thereby the vessel will get the order of priority only when it has again tendered a NOR.

Port of Gothenburg reserves the right to request a copy of the NOR and "Statement of Facts" in case there are any uncertainties that might unravel concerning port-calls.

11.4 Smoking

Smoking is strictly prohibited on open decks, bridges and similar areas regardless of the nature of cargo being carried by the ship. "Smoking prohibited" notices should be posted and be clearly visible onboard. A responsible port representative may, under certain circumstances, prohibit smoking even in places where smoking is normally allowed.

11.5 Repair and maintenance work onboard

According to the General Port Regulations, hot work, the use of open flame, tools that may cause sparks to arise, etc. may only be allowed onboard after being granted a permit by Port Control as well as with permission from the responsible port representative in the Energy Port. See application forms for "Permit for major repairs on vessels" and "Hot work permit on ships" found on www.portofgothenburg.com – E-services. Vessels moored at berths within the Energy Port should always be able to move under their own power at short notice. Permission must first have been granted in writing from Port Control before any work can be carried out on a vessel that will effectively immobilize it. The conditions are that:

- a tugboat with the requisite tug capacity must be available for the entire period the ship is immobilized. This tugboat must be stand-by, confirmed by the chosen tugboat company and be in the vicinity of the vessel
- a berth space will only be granted if no other vessel requests that particular mooring

Starting and testing main and/or auxiliary engines, intended for the vessel's propulsion, is not allowed when handling cargo or when a loading arm is connected. Exemptions can be granted by a responsible port representative.

11.6 Portable electrical equipment

Portable electrical equipment that is not ATEXclassified (including computers, mobile phones, flashlights, radios, radio pagers, cameras, etc.) must not be used on an open deck or on a berth without permission from a responsible port representative.

11.7 Vessel services

11.7.1 Bunkering (Bunker barge/Tanker truck/Shore to Ship Facility)

Bunkering operations are only allowed after permission have been granted by a responsible port representative and Port of Gothenburg's Bunker Safety Checklist shall be used.

Bunkering operations carried out by bunker barge or tanker truck are not allowed when loading, discharging or sampling flammable cargoes, with flashpoint below 30 degrees Celsius, at receiving vessel.

Bunkering operations carried out by bunker barge or tanker truck is also not allowed during cargo operations if the receiving vessel has previously carried a cargo with a flashpoint below 30 degrees Celsius in cargo or slop tanks unless the tanks have been cleaned and the receiving

vessel is gas-free. This must be supported by a gas-free declaration from vessel or validated by an independent surveyor.

Exemption from the above can be made if special conditions, as specified in appendix E, are met.

11.7.2 Removal of sludge from the engine room

The same conditions apply for the removal of sludge as for bunkering operations, see section 11.7.1.

11.7.3 LNG Bunkering

The same conditions as for bunkering operations apply, see section 11.7.1, and see separate LNG Operating Regulations at www.portofgothenburg.com – Operations – Rules and permits.

11.7.4 Other vessel services

Provisioning and other vessel services may only be carried out after permission has been granted by a responsible port representative. No supplies can be delivered before the receiving vessel is alongside. Note that these terms and conditions also apply to quayside vehicles.

11.8 Bunker vessels

Vessels that will conduct bunkering operations within Gothenburg's port area must have a Green Bunkering Certificate, for more information see: www.portofgothenburg.com – Operations – Rules and permits.

The Bunker-app, a digital tool for berth planning and bunkering notices, shall be used by all bunker operators and their vessels. In this tool all bunker vessels shall report all bunkering that are to be performed at berth in the Gothenburg port area, notices about bunkering to VTS Gothenburg at anchorage can be made in the

Bunker-app.

Vessels under 500 BRT lacking ISPS certificate need a Maritime Safety Agreement signed by the Port of Gothenburg.

11.9 Fire, product spillage or injury to personnel

A notice on measures to be taken in the event of a fire, product spillage or injury to personnel should be posted and must be clearly visible onboard, see appendix D.

11.10 Special procedures

11.10.1 Mooring using boatmen

When mooring a vessel with a minimum length of 80 meters (on arrival or departure), this operation should be undertaken by experienced boatmen in accordance with the General Port Regulations for the Port of Gothenburg. In addition, all vessels, regardless of length, mooring at berths 510, 511, 519, 520, 521, 551, 800 and 801 must use the services of experienced boatmen. A responsible port representative can, on occasion, demand that boatmen should be

used even for vessels shorter than 80 meters when conditions such as the weather, maneuverability or the construction of the vessel make it necessary from a safety perspective. Exemptions may be made by a responsible port representative if all applicable safety aspects can be covered.

11.10.2 Communications

VHF communication with the responsible terminal and port representatives, Skarvik/Rya Harbour and Port Control via VHF channel 12, and in Tor Harbour via VHF channel 15/17.

11.10.3 Procedures regarding the weather on arrival, departure or shifting

If the weather forecast (for the weather station designated by the port) indicates average wind speeds in excess of 20 m/s and/or gusts exceeding 25 m/s, the Harbourmaster, or his/her appointed representative, is responsible for deciding if arrivals to or departures from berths at the Energy Port will be allowed or mandated. This decision is based on wind force and wind direction, the particular vessel, availability of tugboats, etc. The master/vessel's officer is responsible for determining the need for tugboat assistance and sea pilot and ordering these services.

11.10.4 Automatic Identification System – AIS

In the Energy Port all vessels shall have their AIS device switched on with low power during the entire port stay, see ISGOTT 4.13.4 for further instructions.

12. Procedures for loading and discharging

12.1 Operational responsibility

When loading or discharging cargo, the recipient or the supply depot or refinery is responsible for the operations. Throughout the operations at least one responsible terminal representative, loadingmaster, should be available at all times in direct connection with the cargo operation, also see sections 14.1.4 – 14.1.5.

12.2 Ship/Shore Safety Checklist

12.2.1 Completing a checklist and follow-up

Before loading or discharging operations can commence the Ship/Shore Safety Checklist must be completed by the responsible vessel's officer and a depot or refinery representative or loadingmaster, and duly signed by these parties. This communication must also state that activities such as operating the cranes must only be carried out by authorized personnel in a safe way. The jetty operator must also sign the checklist and be given a cargo handling plan. The jetty operator is also responsible for follow-up during cargo operations. Exemption from an obligation on a checklist may be granted to vessels with agreed arrangements regarding key loading, see section 12.4.6. Applications for exemption shall be submitted to the Energy Port.

The Ship/Shore Safety Checklist can be found on www.portofgothenburg.com – Operations – Rules and permits.

12.2.2 Responsibility

The responsible vessel's officer and the depot or refinery representatives or loadingmaster are responsible for ensuring the data provided are accurate and that the terms and conditions of the checklist are fulfilled at all times.

12.2.3 Exceptions

Within the private oil terminals, each company is responsible for its work areas.

12.3 Cargo handling plan

Before loading/discharging operations can commence, a cargo handling plan must be completed and signed by the vessel's officer on duty and the depot manager, a representative, or loadingmaster. The jetty operator must also sign the document. The cargo handling plan can be found on www.portofgothenburg.com – Operations – Rules and Permits.

12.4 Special terms and conditions

12.4.1 Approved product hoses

Only approved product hoses tested by an authorized company in the last 12 months may be used. An appropriate approval certificate must be available in all the jetty operator safety folders, and the hoses must be clearly marked with the date of the most recent test and the maximum pressure allowed as well as company name. Hoses that lack marking may be disposed of and destroyed by the port.

12.4.2 Gas tankers to berth 551

The loading or discharging area for gas tankers must be enclosed areas with clearly visible signs. When connecting or disconnecting gas tankers, vessels may not pass to or from adjacent berths (berths 562–563).

12.4.3 Operational restrictions in adverse weather conditions

If the weather forecast, provided by the port, indicate average winds of 20 m/s and/or gusts exceeding 25 m/s, cargo handling operations must be suspended. Loading arms or hoses must be disconnected in a timely manner beforehand for safety reasons and must be securely blanked. The responsible terminal representative may also waive the rules in interest of safety. In the event of a thunderstorm, the general rule constitutes that if the time lapse between the flash of lightning and the subsequent bolt of thunder is less than five seconds cargo handling operations must be suspended, valves closed until time lapse is more than five seconds and the port gives its permission to resume. No disconnection or connection of cargo arms or hoses can take place during thunderstorms for safety reasons.

12.4.4 Operational restrictions for VLCC vessels to berth 801 (LOA > 280m)

With a weather forecast (from weather station assigned by the port) that indicates below wind forces and directions during the estimated time of the port call, Port Control must be consulted before arrival:

- forecast indicating average wind speeds of at least 15 m/s from the NE, E or SE
- forecast indicating average wind speeds of at least 20 m/s from other wind directions

Should a change in weather conditions result in higher wind speeds, cargo operations must be suspended in good time, loading arms disconnected and manifolds securely blanked. To guarantee that the vessel is securely moored, Port Control, in agreement with the vessel's master, must enlist the service of a tugboat.

12.4.5 Special conditions regarding pumping operations in the joint pipeline system in the Energy Port

The temperature of a product in the pipeline system must never exceed 70 degrees Celsius and the maximum operating pressure on all pipelines are 10 bar. When the joint pipeline system is used, the operating terminal shall inform the responsible port representative if they intend to pump products that requires special handling, for example products with a high sulphur content. In case of a power-cut, all cargo handling operations must stop immediately.

12.4.6 Vessels with agreed arrangements on key loading

In order to obtain a key loading agreement, the depot must provide training on the current berth equipment for the vessels in question. After completed training, an agreement is signed between Port of Gothenburg, the vessel and depot. In these cases, vessel officers are responsible for the quayside operations. Both the holder of the berth equipment for key loading and a vessel using the equipment are obligated to inform all users concerned immediately of any alterations to equipment or their operations.

2.5 Interruption

If loading or discharging operations are interrupted, the vessel and jetty manifold valves must be closed.

12.6 Closed loading/discharging

12.6.1 General terms and conditions

In the Energy Port cargoes containing oil products, gas or chemicals should be handled under closed loading conditions.

12.6.2 Exemption

The Energy Port may grant exemption from the terms and conditions in section 12.6.1 under special circumstances.

12.6.3 Tank hatches and ullage openings

All tank hatches and ullage openings must be kept closed. Equalization of vacuum and pressure in cargo tanks shall be via the vessel's P/V valves.

12.6.4 Vapour recovery

Vessels loading products with a flashpoint below 30 degrees Celsius should be connected to a vapour recovery system, a Vapour Return Unit (VRU). When loading fuel oil, Eo3–5, at berth 510/511 the vessels should be connected to a vapour destruction unit, an Odour Control Unit (OCU), to reduce emissions of H₂S and other substances present, such as Volatile Organic Compounds (VOC). The vessel must meet the IMO standards for safety equipment. ISGOTT recommendations should be observed.

12.6.5 Inspection after loading and sampling operations

If requested by a vessel, the responsible operator, loadingmaster, may allow ullage hatches to be opened before or after loading/discharging operations have been completed (+ 30 minutes) in order to level the pressure in the atmosphere in the cargo tanks to enable exact ullages to be obtained or for sampling the cargo. Sampling shall take place in accordance with ISGOTT recommendations, see chapter 12. The responsible port representative and the jetty operator must be informed, and the port representative also has the right to deny this procedure.

12.6.6 Suspending cargo handling operations

Should the above-mentioned rules not be observed, the responsible port representative, terminal personnel or jetty operator have the right to suspend cargo operation immediately. Loading/discharging can only be resumed after the conditions and rules are met. The responsible port representative is the person who decides. A deviation report must be written.

13. Procedures for tank cleaning operations

13.1 General

Cleaning vessels' cargo tanks, tank cleaning, at the quayside within the Energy port is not allowed without special permit. Tank cleaning entails an increased risk for flammable and hazardous gases to escape, as well as a risk for flammable gases to ignite. Consequently, special restrictions are in force within the Energy Port. Normally, the last tank pair is approved for tank cleaning while alongside. Cleaning and venting slop tanks that have contained wash water may be allowed, taking into consideration certain limits on emissions to the atmosphere. ISGOTT recommendations should be observed.

13.2 Notification

The responsible vessel's officer on duty must inform the responsible port representative of the intention to clean the vessel's tanks, and request permission to do so before any work can commence. If wash water is to be discharged ashore, an agreement must be made with the recipient depot.

13.3 Checklist

Before tank cleaning operations can commence, a special checklist must be completed and signed by the responsible officer on duty and a responsible port representative, see www.portofgothenburg.com – Operations – Rules and permits. When pumping wash water ashore, section 14.1.5 applies. The Swedish Transport Agency's regulations should be observed.

13.4 Responsibility

The responsible officer on duty must ensure that operations are carried out safely. The officer onboard responsible for the operations must have the appropriate qualifications.

13.5 General regulations for the operation

Appropriate gas measurements must be carried out by a person authorised to do so. The Energy Port reserves the right to appoint an independent inspector for sampling, if deemed necessary.

13.6 Watch officer onboard

The following conditions must be met:

- the responsible officer on duty should appoint a watch officer from the crew
- a watch officer must be present on deck during cleaning operations
- a watch officer must be present in deck when pumping wash water ashore

13.7 Inspection

The responsible port representative has the right to check the equipment for tank cleaning, venting and the communications system are in satisfactory condition and that the proposed method is acceptable.

13.8 Flushing

Flushing of tanks, flush of water on the tank bottom to remove any cargo residues, is permitted at berth with the prerequisites that there is no free fall of water in the tanks regarding static electricity, see ISGOTT 3.2.6 and 3.2.7. Permission for flushing will be given to ships by the port representative on duty.

13.9 Crude oil washing

ISGOTT recommendations should be observed.

13.10 Discharging ballast water

When discharging ballast water, the same procedures apply as when discharging a product, see section 12.

13.11 Discharging ballast water within Gothenburg's port area

Only clean ballast water from segregated ballast tanks (SBT) can be discharged in to the sea, the harbor or other port areas managed by the Energy Port. The master/vessel's officer is

responsible for ensuring discharge of ballast water is stopped if it is discovered or suspected that the ballast water has been contaminated with oil. The responsible port representative should be informed immediately. The International Convention for the Control and Management of Ships' Ballast Water and Sediments (Ballast Water Management Convention) shall be followed.

C – Operating practices for business within the Energy Port

14. General operating practices for business within the Energy Port

14.1 Responsibility for co-operation

14.1.1 Joint work area

Those in charge of a joint work area are responsible for coordinating measures aimed at preventing health hazards and accidents, according to the Swedish Work Environment Act (SFS 1977:1160). The Energy Port has three joint work areas managed by the Port of Gothenburg. Head of Business Area Energy Operation is therefore, by law, responsible for co-operation, unless stipulated otherwise below.

14.1.2 Leasehold areas and holdings in Tor Harbour, Skarvik and Rya Harbour

The leasehold areas and holding in Tor Harbour, Skarvik and Rya Harbour are work areas which the lessees manage individually. The individual lessee/holder is therefore responsible for co-operation within these areas. It should be noted that certain conditions are regulated in the leasehold and holdings agreements.

14.1.3 Request for alterations at a facility

Any modifications to be made which are intended to alter pressure equipment, pipelines, rotary equipment, instruments, electrical installations, emergency stop installations, platforms and deviations from current operating circumstances must go through a procedure to guarantee that the modifications can be carried out safely. The procedure should guarantee the function, integrity, safety and environment.

In the event a company intends to carry out modifications that will affect any of Port of Gothenburg's facilities, a proposal of these alterations must be submitted to the Port of Gothenburg, after which the terms and conditions of the procedure will be determined. Lessees/ holders affected by modifications must first be informed so they can give their approval.

14.1.4 Green card – authorisation for work within the Energy Port

All professional categories carrying out work within the Energy Port must have proper qualifications and training for their employment category according to the agreement between the Port of Gothenburg and the companies within the Energy Port. The definitions of the categories are according to the training matrix for a Green card, see appendix F. If the rules and

procedures are not followed, authorisation for work within the Energy Port will be withdrawn, see section 3.5 for consequences of violation.

All personnel on duty within the port must have good knowledge of the Swedish or English language, spoken as well as written, or have someone in their immediate vicinity with this knowledge. If the Port of Gothenburg consider the personnel to be unqualified or to be insufficient in numbers for an operation, the port representative has the right to stop the operation.

14.1.5 Discharging operations

When discharging, the recipient, depot or refinery, is in charge and responsible for the work area including where the ship is moored, and the part of the pipeline system used that leads up to the recipient's depot or refinery area. A work area is considered to be set up as soon as the Ship/Shore Safety Checklist has been signed by the responsible vessel's officer and a responsible representative for the depot or refinery. The work area is considered dismantled when the responsible representative for the depot or refinery have signed the checklist at a designated place, declaring that the discharge operation has been completed in the prescribed manner.

14.1.6 Loading operations

When carrying out loading operations, the supplying depot or refinery is in charge of, and responsible for, the work area including the vessel's mooring berth and the part of the pipeline system use from the supply depot or refinery.

14.1.7 Lightering operations alongside

Lightering operations between vessels alongside a berth in the Energy Port is generally not permitted, but vessels are referred to carry out these operations at anchorage after contact with the relevant authorities. Applicable lightering between two bunker barges, see section 14.1.8.

14.1.8 Lightering operation bunker barge

A lightering operation between two bunker barges, at berth 506–509 or 512–518, can be conducted after approval from the harbour office or the port representative. Both vessels should be securely moored considering the prevailing circumstances and current operation as well as that there is a secure solution for any person transfer. There are some prerequisites that must be fulfilled if a cargo operation is to be conducted simultaneous as the lightering. These prerequisites concern the manning when two operations are conducted continuously resulting in the requirements of minimum two persons on deck and one in the cargo control room on the vessel that have two simultaneous operations. A checklist for lightering must be used.

14.1.9 Pumping between companies

When pumping between companies, the recipient company is in charge of, and responsible for, the work area including the pipeline system used. A company pumping between its own depots is in charge and responsible for the work area including the pipelines used.

14.1.10 Other work

When work is being carried out outside leasehold areas and holdings within the Energy Port, the client commissioning the work is in charge of and responsible for the work area. A work area is considered to be set up when a work permit has been signed by a responsible port representative. The work area is considered dismantled when a responsible port representative has inspected the site and signed the permit.

14.2 Work permits

14.2.1 General

A person/company intending to carry out work in an area not under their direct control must obtain a permit from the person/company in charge of the work area, i.e. a work permit.

In addition to a work permit, a special hot work permit is required for all work with open flames, heat, hot surfaces, tools that may cause sparks to arise or electrical equipment not approved for use in areas where flammable gases can occur. The responsibility for obtaining a hot work permit lies with whoever intends to carry out the activity that requires a permit in that particular area. In addition, there is a responsibility to consult and, in some cases, obtain approval from the Port of Gothenburg.

A responsible port representative has the right to cancel or immediately suspend work if the instructions given are not being followed, or if there is a probable risk for an incident or accident occurring. The responsible port representative also has the right to inspect and stop work if necessary, even inside leasehold areas.

14.2.2 Work permit for areas within the Port of Gothenburg

A person/company intending to carry out work on equipment located on Port of Gothenburg's land, berths or in the surrounding waters in the Energy Port, i.e. outside leasehold areas and holdings, must inform a port representative before any work can commence.

14.2.3 Hot work

The SRV:FS 2004:7 9§ (Emergency Rescue) stipulates that in areas where there are several business operations that handle flammable gases and liquids, one of the businesses should be responsible for coordinating the safety work. Within the Energy Port, Gothenburg Port Authority is responsible for the co-operation.

The person responsible for issuing permits at each business operation is responsible for ensuring the hot work and/or planned discharge of gas are reported to ensure co-operation. Applications for co-operation permits should be submitted via the port's website where additional information can be found, www.portofgothenburg.com – E-services – Permesso.

Hot work permits for work on Port of Gothenburg's equipment and areas may be issued by the manager of flammable goods according to delegation.

Performers and any fire guards must have a valid hot work certificate.

14.2.3.1 Hot work – working conditions

Hot work is all work conducted with open flame, sparking, fast or heat forming tools which can cause a spark or heat that are enough to ignite a well carburized flammable gas.

- Category 1 (risk distance 25m); heat gun, welding equipment, cutter, etc.
- Category 2 (risk distance 15m); battery driven screwdriver, non-EX-proof equipment, construction of work vehicles and cellphones

Cameras, filming equipment and measuring equipment which are operated with batteries belongs to Category 2 work, but does not require any hot work certification thus a hot work permit.

14.3 The co-operation committee for the Energy Port

All leaseholders and title deed holders in the Energy Port shall participate on the co-operation committee. The co-operation committee deals with and decides on joint issues regarding the environment, safety and other joint issues. The co-operation committee includes representatives from the companies operating in the Energy Port and representatives from the County Administrative Board and the Greater Gothenburg Rescue Services. The Port of Gothenburg chairs the committee.

15. Procedures for jetty operators and pipeline operator

15.1 Application

With reference to section 12.1 it is incumbent on the responsible operational loadingmaster to provide the jetty operator and pipeline operator according to the procedures below. It is incumbent on the responsible loadingmaster to decide how many jetty operators that are required so as not to jeopardise safe handling, given the circumstances relating to the particular operation (see also section 15.5). A pipeline operator should supervise the pipelines being used for pumping within the Energy Port, in accordance with applicable pipeline operator agreement. When pumping via the Port of Gothenburg's pipeline system, there is a special agreement on who can carry out the supervision.

15.2 Authorisation

The responsible loadingmaster must have a certificate of completion of a training course for loadingmasters, as approved by the Port of Gothenburg. The responsible operational representative must also have good local knowledge of the actual work area and the relevant equipment. The jetty- and pipeline operator must, in addition to theoretic education, also have good practical knowledge of the operation and the objects to be supervised. Generally, a jetty- and pipeline operator must also be suitable for the task. The responsible loadingmaster is

responsible for ensuring that jetty- and pipeline operators meet the above-mentioned requirements.

15.3 Identification

Jetty operators should wear orange helmets marked “Jetty Operator”.

15.4 Communications

Jetty- and pipeline operators should be equipped with a communication system of an approved type (explosive proof), which in the case of a jetty operator can be a radio or a telephone, and for a pipeline operator, a radio. During cargo operations, loading or discharging, the jetty operator should be in continuous contact with the ship and the depot/refinery. During cargo operations the pipeline operator should be in continuous contact with the jetty operator and the depot/refinery, and when pumping between depots the contact should be with the pumping and receiving depot/refinery.

15.5 Minimum number of jetty operators

15.5.1 Normal operation

There must be at least one jetty operator by every vessel that is conducting a cargo operation. The jetty operator cannot, at the same time, be the loadingmaster or pipeline operator.

15.5.2 Exceptions at Tor Harbour

When conducting a cargo operation, loading or discharging, at Tor Harbour berths 800 and 801, the following rules apply:

- during cargo operation, loading or discharging, at least two jetty operators must be present, one of whom must always be present at the vessel's berth
- during cargo operation, loading or discharging, of two vessels simultaneously, at least three jetty operators must be present, one of whom must always be present at each berth

15.5.3 Additional supervision

In consideration of certain safety and environmental hazards, the responsible port representative may temporarily order additional supervision.

15.6 Reporting

15.6.1 Jetty operator

A jetty operator should keep a record during the cargo operation according to the Jetty Operator report, see www.portofgothenburg.com – Operations – Rules and permits. After each loading or discharging operation, this report should be submitted to the responsible depot/ refinery representative as well as to the responsible port representative.

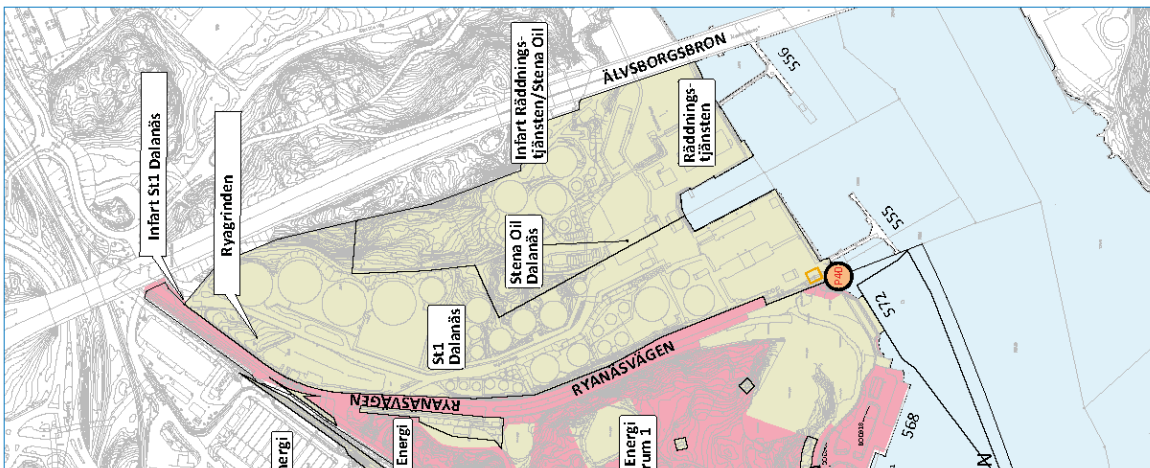
15.6.2 Pipeline operator

A pipeline operator must keep a record during every pumping operation according to the Pipeline Operator report, see www.portofgothenburg.com – Operations – Rules and permits. When the pipeline is no longer being used, the report should be submitted to the depot responsible for the operation.

15.7 Deviation reports

Jetty- and pipeline operators should report immediately to the depot responsible for the operation if there are deviations from these operational procedures or from instructions given by the Energy Port. Faulty equipment must be reported immediately to the owner of the facility.

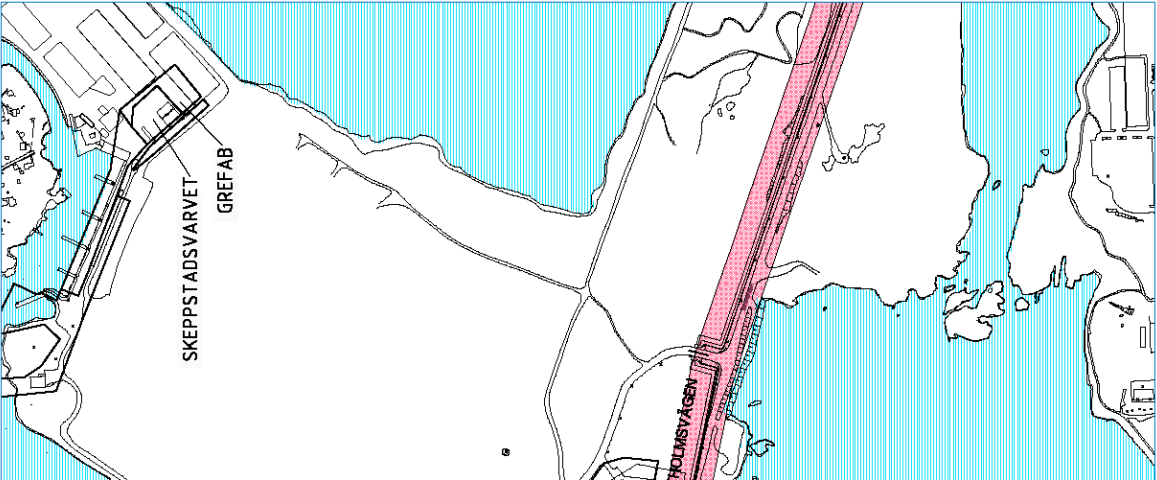
D – Appendices



APPENDIX

A

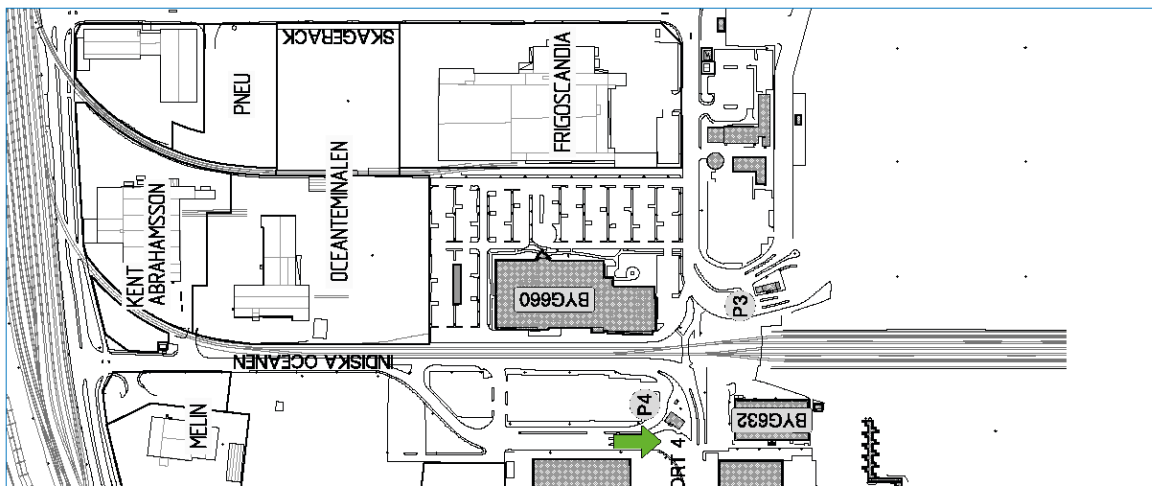
KARVIK AND
A HARBOURS



APPENDIX

B

OR HARBOUR



APPENDIX

C

INDIA HARBOUR
BERTH 644
IND SYRHÅLA



IMPORTANT INFORMATION

To be posted in a conspicuous place onboard

APPENDIX

D

Procedures onboard ships in the Gothenburg Energy Port in case of fire or outflow of product

FIRE



REGULATIONS FOR BUNKER OPERATIONS FOR CLASS 1 VESSELS

APPENDIX

E

Certificate for allowing bunker operation during low flashpoint (below 30°C) cargo handling on receiving ship

Following rules applies to ships calling jettys administrated by Port of Gothenburg, Energy Port.

- Master of receiving vessel to confirm, after agreement with "loadingmaster", what time bunkering will be allowed. Bunkering cannot take place before pre-loading-meeting.
- Ullaging, sampling, connecting and disconnecting



TRAINING MATRIX FOR SOHF AND GREEN CARD 2020

APPENDIX

F

0 (Page 1 of 2)

every 5th year

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Gothenburg



TRAINING MATRIX FOR SOHF AND GREEN CARD 2020

APPENDIX F

0 (Page 2 of 2)

every 5th year

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Gothenburg

