

# FJORD BASE

Norway's largest supply base



## Terminal Information Booklet

Information for visitors, clients, vessels and operators

## Introduction

This Terminal Information Booklet (TIB) is created to meet the need for information for the users of Fjord Base port facility in Florø. TIB contains general information, regulations, procedures for work safety, emergency procedures, as well as specific information on vessel management.

The content of this booklet should be used along with the standard "International Safety Guide for Oil Tankers and Terminals" (ISGOTT) and the ISPS regulations.

Fjord Base AS is the property company at Fjord Base. They are a part of the INC Group, which consist of several companies who provide services to both offshore and land-based industry. You can find more information on [www.incgruppen.no](http://www.incgruppen.no). Saga Fjordbase AS is the operating company at Fjord Base and are responsible for the assignment of berths, mooring, transport and loading/unloading vessels arriving at the base.

Contact information and opening hours:

<b>24/7</b>	Duty phone Base Services/Reservation of berth	+4791801041
<b>24/7</b>	Duty phone Bulk/Bunker (LNG)	+4799405821
<b>24/7</b>	Port security	+4795191236
<b>08:00-16:00</b>	Fjord Base AS Saga Fjordbase AS INC Invest AS INC Support	+4757751800

\*Online bookings to be used during daytime. See [www.incgruppen.no](http://www.incgruppen.no).

## Innhold

<b>Terminal Information Booklet</b> .....	1
<b>Introduction</b> .....	2
1. Fire and emergency procedures.....	5
1.1 Alarms .....	5
1.2 Emergency communication.....	5
1.3 General instructions for emergency and evacuation .....	5
2. Health, Safety and Environment (HSE) .....	6
2.1 General information .....	6
2.2 Personal protective equipment .....	6
2.3 Drugs/Intoxicants .....	6
2.4 Waste disposal.....	7
2.5 AIS-signal – use of GSM amplifiers .....	7
3. ISPS and security .....	7
3.1 Personnel admittance and driving permits .....	7
3.2 Issuance of temporary ID cards.....	8
3.3 Issuance of permanent ID cards .....	8
3.4 Supplies to the vessel .....	8
3.5 Diving.....	8
4. Communication upon arrival.....	9
4.1 Reservation of berth and notice of arrival .....	9
4.2 Waste disposal.....	9
4.3 HSE Safety Data Sheets (SDS) and labelling .....	9
4.4 Hot work/hazardous work .....	10
5. Port area and mooring .....	10
5.1 General description of port area .....	10
Quay A .....	11
Quay B.....	11
Quay C .....	11
Quay E .....	12
Quay F .....	12
Quay G .....	13
Quay H – RO-RO .....	13
5.2 Tugboats .....	13
5.3 Mooring.....	14
5.4 Vessel/gangway.....	15

6. Communication at the port .....	16
6.1 General information .....	16
6.2 Ship/shore check before bunker loading/unloading .....	16
6.3 Communication during loading and unloading .....	16
7. Distribution of responsibilities .....	17
7.1 Jurisdiction .....	17
7.2 Conditions for acceptance .....	17
7.3 Distribution of responsibilities .....	17
8. Bulk and bunker operations.....	17
8.1 General information .....	17
8.2 Hoses and couplings .....	18
8.3 Bulk/bunkering rate.....	18
8.4 Controls .....	18
8.5 Criteria for work in various weather conditions.....	18
8.6 Emergency stop .....	19
8.7 Secondary vessels – mooring alongside other vessel.....	19
8.8 Drinking water (FW) .....	19
8.9 LNG .....	19
8.10 Smoking and use of matches/lighters .....	19
8.11 Portable electrical equipment, including phones.....	20
9. Overview and information about Fjord Base .....	20

## 1. Fire and emergency procedures

### 1.1 Alarms

An alarm will initiate in the case of:

Fire on board a vessel or in the terminal/port area.

Explosion on board a vessel or in the terminal/port area.

Emission of poisonous and/or flammable gas (LNG terminal, quay D).

#### ALARM SIGNALS AT FJORD BASE

Industrial Safety Alarm: Siren, 1-minute continuous sound.

Gas Alarm: Several short alarm bells will sound (Vessel: the horn will sound for at least 10 seconds, in addition to the vessel's general alarm system).

Fire Alarm: A short alarm signal will sound in 1-second intervals.

### 1.2 Emergency communication

At Fjord Base's facilities in Florø, the primary form of communication with vessels is by VHF or phone, as well as direct communication on board the vessels.

### 1.3 General instructions for emergency and evacuation

#### REPORTING ACCIDENTS AT FJORD BASE

In the case of severe accidents or hazardous situations involving humans, environment and materiel:

1. Alert others who could be in danger.
2. Call 110 to initiate automatic response from police, fire department, paramedic and industrial safety crew at Fjord Base. Potential evacuation to a safe area will be carried out.
3. Operating company Saga Fjordbase will also be alerted. They are responsible for any further handling of the incident, such as notifying public authorities, INC's emergency team and clients.

## 2. Health, Safety and Environment (HSE)

### 2.1 General information

When vessels are berthing, HSE responsibility is shared between the leader for quay operations and a representative from the vessel. It is necessary that both the representative and the responsible leader cooperate and understand all current requirements for HSE. If anything is unclarified, a representative from the vessel is expected to contact Saga Fjordbase AS through the Logistics Centre (Logistikkcenter) on their 24-hour duty phone for Base Services: +4791801041.

Vessels are expected to follow all current guidelines throughout their stay at Fjord Base. Representatives from Fjord Base/Saga Fjordbase will follow the same guidelines and cooperate to obtain a 100% safe and efficient operation.

If any incidents, near-incidents or conditions that may result in injuries to personnel, materiel or environment should occur at the port facility, this is to be reported to the Logistics Centre via mail: [kaikontor@incgruppen.no](mailto:kaikontor@incgruppen.no), and/or via a report that can be sent to HMSK (HSE Office): [avviksteam@incgruppen.no](mailto:avviksteam@incgruppen.no).

### 2.2 Personal protective equipment

The following are minimum requirements for Personal Protective Equipment (PPE), and are to be used at all quays and facilities at Fjord Base:

- High visibility clothing (overalls during work, high visibility vest when using the walkways)
- Safety helmet
- Accessible safety goggles
- Safety boots (*Exemption when crew enter/leave the vessels*)
- Life jacket during mooring or cast off/mooring operations.

PPE must be used when handling chemicals, as specified by HSE Safety Data Sheets (SDS).

Use available, indicated walkways when walking around. High visibility clothing must be used during your stay at the base. The vessel is responsible for handing out any necessary PPE to visitors, as well as informing Port Security about the visit.

### 2.3 Drugs/Intoxicants

All vessels arriving to the port should have an established drug policy and procedure. All operations must be stopped if any of the operators or crew are suspected to be under the influence of drugs or other substances.

## 2.4 Waste disposal

Saga Fjordbase AS can organise containers for any type of waste. This can be ordered through the Logistics Centre/port office (NB – sealed bins must always be used for food waste). All equipment and waste must be removed when the vessel leaves the port. If this is not organised, expenses for cleaning will be charged to the vessel/agent.

Be aware that any kitchen- and food waste from international traffic outside the EU should be treated as category 1 waste. Ref. regulation No. 1254 on animal byproducts not intended for consumption (EU No. 1774/2002) and regulation No. 1621 on public control adherent to regulations regarding feed, nutrients and welfare of animals (EU No. 882/2004).

## 2.5 AIS-signal – use of GSM amplifiers

The AIS must not be switched off when ashore. This is because AIS is Saga Fjordbase Logistic Centre's "radar" for the port terminal. Using GSM amplifiers should be limited to a minimum when ashore, as there are some sensitive equipment at the base.

# 3. ISPS and security

Port areas at Fjord Base are defined as ISPS areas, and access is regulated with access cards and access control. The ISPS code has three security levels: 1, 2 and 3.

## I. Level 1 – Normal

Standard security measures in use at any time

## II. Level 2 – Heightened

Additional security measures are implemented, patrols are increased

## III. Level 3 – Critical

At this level, additional security measures are implemented in a limited time if an event is likely to happen or immediate. At Fjord Base this may result in expulsion of vessels or a delay in scheduled vessel arrivals.

If security levels are changed, vessels will be made aware of this and be instructed on how to respond. This is coordinated via the Security Manager/PFSO Fjord Base AS.

## 3.1 Personnel admittance and driving permits

Fjord Base have defined areas that are secured according to ISPS and NOG 091 (Norwegian Oil and Gas). All quays are within ISPS regulations, accordingly there are requirements for



access control to the base area and quays that are within a secured area. Personnel without necessary identification will be shown away from the area, and the Security Manager/PFSO will be notified.

There are automatic gate openers installed at the entry gates in the controlled area (ISPS) which will only open for an approved gate opener in combination with an approved access card. Vehicles without an approved driving permit are not permitted into the port facility. Contact Port Security for applications regarding personnel admittance.

The vessel is responsible for reporting and applying for approval of vehicles with deliveries to the vessel. Personnel who are in any way intoxicated will be denied access to the area. In such cases, the person responsible on board the vessel will be contacted by Port Security.

Personnel and vehicles who are inside the ISPS areas must have visible and approved identification.

### 3.2 Issuance of temporary ID cards

Contact Port Security for the issuance of ID cards. A control is to be expected, and such an issuance requires the display of valid identification for the person in question. Personnel who are registered on crew lists will usually not receive a temporary ID when their names are found on the crew list and valid documentation is present.

### 3.3 Issuance of permanent ID cards

Before receiving the ID card, the recipient must show officially validated identification.

### 3.4 Supplies to the vessel

Supplies can be transported to the port as long as current security regulations are kept. (Special regulations could be relevant for controlled areas.) Access will be given by Port Security or Security Manager. The vessel's cranes can be used to load/unload own supplies and spare parts, but equipment which can produce sparks, such as steel barrels, pipes etc., must not be lifted without permission from Saga Fjordbase Logistics Centre.

### 3.5 Diving

Diving operations in the port area are not permitted without an approval from the Logistics Centre. Special regulations will apply in a case of increased security levels.



## 4. Communication upon arrival

### 4.1 Reservation of berth and notice of arrival

Vessels under way to Fjord Base must give a notice of arrival via [SafeSeaNet](#) and [Port Arrival Notification](#) to Port Security and the Logistics Centre/port office at least 48 hours before arrival, or immediately when the vessel is leaving its last port/installation. This notice should include all relevant information.

Berths are reserved by sending an email to Saga Fjordbase Logistics Centre within regular working hours (08.00-16.00): [kaikontor@incgruppen.no](mailto:kaikontor@incgruppen.no). For reservations outside regular working hours, please contact Port Security.

When reserving a berth, you must provide the following information:

- Name of vessel
- Name of employer/operating company
- Name and number of responsible contact person/agent for the operation during the whole stay
- Billing information for berth/ISPS surcharge
- Estimated time of arrival (ETA) and estimated time of departure (ETD)
- Type of operation (unload-load-mobilization/recourses needed)
- Need of bunkering? (Water, fuel, LNG-MGO-other)
- Shore connected power

Saga Fjordbase will confirm when available berth is assigned.

### 4.2 Waste disposal

If disposal of waste is needed, this must be specified in the arrival notification and coordinated with the Logistics Centre. All vessels without a documented waste disposal plan and waste disposal agreement will be charged with an administration fee, and waste can be registered and delivered to assigned containers by fraction. The same fee will apply if Fjord Base/Saga Fjordbase AS are to organise waste skips during the stay. It is expected that all equipment and waste is removed when the vessel leaves the port. For further information, see section 2.4. in this booklet.

### 4.3 HSE Safety Data Sheets (SDS) and labelling

HSE Safety Data Sheets (SDS) will follow the products so that this is available to the personnel before any handling of these. Products must be labelled with the correct hazard classification.

#### 4.4 Hot work/hazardous work

Any hot work or other work that can cause hazard performed on board the vessel or in the port area during the stay at Fjord Base must be applied for. Information about current regulations and submitting the application can be done via email to [kaikontor@incgruppen.no](mailto:kaikontor@incgruppen.no), or after opening hours by calling +4791801041 (duty phone Base Services). Application form is found at [www.incgruppen.no](http://www.incgruppen.no).

## 5. Port area and mooring

The owner of the port is Fjord Base AS (except quay G, owned by Flora Port Authority), operator is Saga Fjordbase AS. Classification ISPS NOFRO-003.

### 5.1 General description of port area

The quays are build on pilings and the fenders are mainly dumper tires. Mooring points are placed along all quays (see attached scetches). If information about the quays is needed, this is also available here: *Quay information*

There are no specific restrictions on maximum wave height or wind, such restrictions will depend on type of vessel and its gear. It will be up to the captain of the vessel, in correspondance with the terminal, to evaluate and perform a risk analysis before mooring. Saga Fjordbase can in certain circumstances deny the arrival of a vessel if the weather conditions indicates it.

There are no restrictions on the vessel's length or width in order to arrive at Fjord Base, but not every quay have the facilities for larger vessels which require mooring points beyond regular mooring. In such cases, Saga Fjordbase must be notified as soon as possible and a specific plan for mooring and restrictions is to be agreed on.

#### **Port fenders:**

The quays at Fjord Base mainly use dumper tires as fenders. This means that there are no information on the technical capacity of these tires (i.e. how much strain they can handle). All vessels must therefore approach the berth as parallel as possible and keep at a low speed (<0,3 knots) the last 5 meters before making contact with the quay. There is a high friction in the tires, and this must be considered so that no dangerous situations occur. Vessels with their own fixed fenders are to make sure that these do not damage the fender points at the quay. Any damages to the quays or fenders are to be reported immediately to Port Security and Saga Fjordbase Logistics Centre.

### Quay A

**Category:** Dry bulk, general cargo, container, offshore, wet bulk, standby quay

**Maximum ship length (m):** 150

**Bollard strength (tonnes):** 100

**Minimum depth at quayside:** -8,5m (LAT)

**Maximum concentrated load (tonnes):** 120 (1 x 1 m)

**Distributed load (tonnes/m<sup>2</sup>):** 10

**Length (m):** 100

**Freshwater capacity (m<sup>3</sup>/h):** 180 (2x90)

**Bunker, MDO (m<sup>3</sup>/h):** 150

**Power outlet:** 400/220V/50Hz

**Shore connected power:** Outlet 1MW (July 2017)

**Waste disposal:** Required waste disposal should be stated in "Port Arrival Notification" with correct amount and type of waste.

### Quay B

**Category:** Standby quay, general cargo, offshore, wet bulk

**Maximum ship length (m):** 120

**Bollard strength (tonnes):** 100

**Minimum depth at quayside:** -17m (LAT)

**Maximum concentrated load (tonnes):** 120 (1 x 1 m)

**Distributed load (tonnes/m<sup>2</sup>):** 10, evenly distributed

**Length (m):** 50

**Freshwater capacity (m<sup>3</sup>/h):** 90

**Bunker, MDO (m<sup>3</sup>/h):** 150

**Power outlet:** 400/220V/50Hz

**Waste disposal:** Required waste disposal should be stated in "Port Arrival Notification" with correct amount and type of waste.

### Quay C

**Category:** Offshore, standby quay, general cargo, dry and wet bulk

**Maximum ship length (m):** 120 m

**Bollard strength (tonnes):** 100

**Minimum depth at quayside:** -8,3m (LAT)

**Maximum concentrated load (tonnes):** 70 (1 x 1 m)

**Distributed load (tonnes/m<sup>2</sup>):** 5, evenly distributed

**Length (m):** 60

**Freshwater capacity (m<sup>3</sup>/h):** 90

**Bunker, MDO (m<sup>3</sup>/h):** 150

**Power outlet:** 400/220V/50Hz

**Waste disposal:** Required waste disposal should be stated in "Port Arrival Notification" with correct amount and type of waste.

### Quay D

**Category:** Offshore, general cargo, container, standby quay

**Maximum ship length (m):** 120

**Bollard strength (tonnes):** 100

**Minimum depth at quayside:** -8,5 m (LAT) NB! Bulb no further east than vertical pillar on dolphin

**Maximum concentrated load (tonnes/m<sup>2</sup>):** 70 (1 x 1 m)

**Distributed load (tonnes/m<sup>2</sup>):** 5, evenly distributed

**Length (m):** 40

**Freshwater capacity (m<sup>3</sup>/h):** 90

**Waste disposal:** Required waste disposal should be stated in "Port Arrival Notification" with correct amount and type of waste.

### LNG-bunkering

**Power outlet:** 400/220V/50Hz (do *not* use during LNG-bunkering)

**The following rules apply during LNG-bunkering:**

- No smoking
- Hot work forbidden
- Authorised personnel only

### Quay E

**Category:** General cargo, container, offshore, standby quay

**Maximum ship length (m):** 200

**Bollard strength (tonnes):** 100

**Minimum depth at quayside:** -10 m (LAT)

**Maximum concentrated load (tonnes):** 120 (1 x 1 m)

**Distributed load (tonnes/m<sup>2</sup>):** 10, evenly distributed

**Length (m):** 100

**Specifics:** Quay for receiving bulk cargo – pipes/tubing

**Freshwater capacity (m<sup>3</sup>/h):** 90

**Power outlet:** 400/220V/50Hz

**Waste disposal:** Required waste disposal should be stated in "Port Arrival Notification" with correct amount and type of waste.

### Quay F

**Category:** General cargo, container, offshore, wet bulk, standby quay

**Maximum ship length (m):** 120

**Bollard strength (tonnes):** 100

**Minimum depth at quayside:** -9,25m (LAT)

**Maximum concentrated load (tonnes):** 120 (1 x1 m)

**Distributed load (tonnes/m<sup>2</sup>):** 10, evenly distributed

**Length (m):** 90

**Freshwater capacity (m<sup>3</sup>/h):** 90

**Bunker, MDO (m<sup>3</sup>/h):** 150

**Power outlet:** 400/220V/50Hz

**Shore connected power:** Outlet 1MW (July 2017)

**Waste disposal:** Required waste disposal should be stated in "Port Arrival Notification" with correct amount and type of waste.

#### Quay G

**Category:** General cargo, container, offshore, wet bulk, standby quay

**Maximum ship length (m):** 250

**Bollard strength (tonnes):** 100

**Minimum depth at quayside:** -12,3m (LAT)

**Maximum concentrated load (tonnes):** 120 (1×1 m)

**Distributed load (tonnes/m<sup>2</sup>):** 10, evenly distributed

**Length (m):** 150

**Quay owner:** Flora Harbour KF

**Classification:** ISPS (NOFRO-003)

**Operator:** Saga Fjordbase AS

**Freshwater capacity (m<sup>3</sup>/h):** 90

**Power outlet:** 400/220V/50Hz

**Waste disposal:** Required waste disposal should be stated in "Port Arrival Notification" with correct amount and type of waste.

#### Quay H – RO-RO

*RO-RO-ramp built in the "extension" of quay C so that this must be used for berthing.*

**Category:** RO-RO

**Maximum concentrated load (tonnes/m<sup>2</sup>):** 70

**Distributed load (tonnes):** 5, evenly distributed

**Bollard strength (tonnes):** 100

**Minimum depth at quayside:** -7,7 m (LAT)

**Maximum ship length (m):** 120 – 150

**Width ramp (m):** 26

**Waste disposal:** Required waste disposal should be stated in "Port Arrival Notification" with correct amount and type of waste.

## 5.2 Tugboats

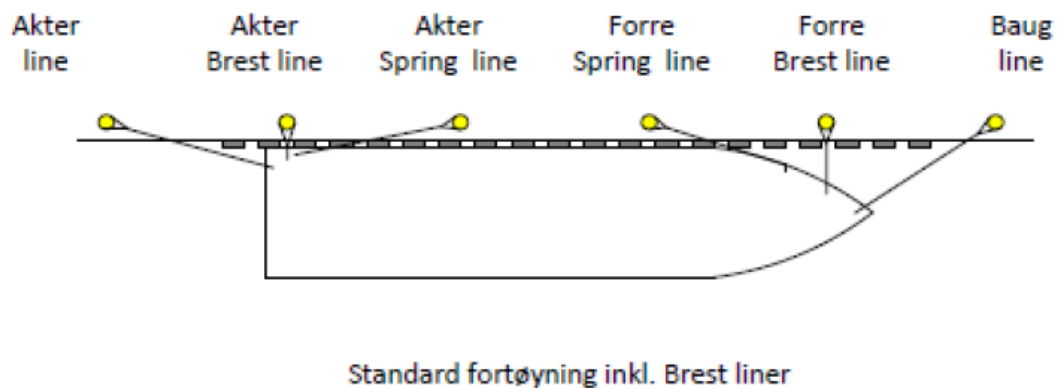
Flora Port Authority or Fjord Base have no minimum requirements regarding the use of tugboats. Vessels measured to over 140 m "Length Overall" (LOA) are expected to have an efficient bow thruster and a rudder with large rudder deflection.

The alternative is a thruster in the stern or two propellers, etc. If these are not in good condition, the vessel should consider a tugboat to be able to berth safely. It is the captain of the vessel who is responsible for safe mooring. The port facility's requirements regarding tugboats may change depending on the judgment of the pilot, the vessel's manoeuvring ability and weather conditions.

### 5.3 Mooring

General guidelines for mooring:

- Breast lines should be kept as perpendicular (straight-angled) as possible on the longitudinal centre line of the vessel, and placed as far aft / forward as possible. The base has no requirements on the use of breast lines.
- Spring lines should be kept as parallel as possible on the longitudinal centre line of the vessel.
- The mooring lines' vertical angle should be kept at a minimum.
- In general, mooring lines of the same size and material should be used for all lines. If this is not possible due to which equipment is available, all lines performing the same "service", i.e. breast lines, spring lines, bow/aft lines, etc., should be of the same size and material. As an example, all spring lines can be wire and all breast lines can be synthetic.
- Mooring lines should be arranged so that all lines performing the same "service" have equal length between the vessel's winch and the quay's bollard. The elasticity of the lines will vary depending on the length of the line, and shorter lines will take more strain.



Mooring scheme in scetch above: Aft line, Aft Breast line, Aft Spring line, Forward Spring line, Forward Breast line, Bow line. Standard mooring including Breast lines.

Vessels must use authorised mooring personnel on shore, unless other agreements have been made. Authorised mooring personnel should be able to document knowledge about HSE in the base area, review relevant mooring procedure, as well as document a review of the risk analysis relevant for mooring. Saga Fjordbase's mooring procedure will apply during the operation.

Method of communication must be agreed on before mooring. (See section 6.1.). The

captain is responsible for making sure that the vessel is moored securely during the whole stay at Fjord Base, it is therefore the captain's responsibility to make sure that all mooring lines are functional and properly tightened in case of a change in weather conditions. A complete description of all quays, including details on dimensions, depth and available bollards, is found in this *Terminal Information Booklet* and at [www.incgruppen.no](http://www.incgruppen.no).

#### 5.4 Vessel/gangway

All moored vessels must install an approved gangway with a safety net to ensure a safe passage between the vessel and land. Access to/from vessels is not permitted before an approved gangway is installed and secured. Ref. § 9 in "Forskrift om sikkerhetstiltak m.m. på passasjer-, lastefartøy og lektere" (Act of 1987, Norwegian Ministry of Trade, Industry and Fisheries).



## 6. Communication at the port

### 6.1 General information

Prior to any communication regarding the operation ("pre-work conversation"), both parties must agree on which communication system to use primarily, but portable VHF/UHF-radios are preferred. A transmission test is carried out to make sure that there are no interference in the communication.

During bulk/bunker operations, the vessel's representative must have access to the chosen communication tool, and a transmission test should be performed every hour at a minimum.

To avoid misunderstandings, the vessel's name should always be used as identification when communicating. The call signal is normally "Saga Fjordbase Fortøyning" and the vessel's name as the counterpart.

### 6.2 Ship/shore check before bunker loading/unloading

Before bunkering, a representative from Saga Fjordbase or Statoil Fuel and Retail, Bulk unit, will request a review and signing of Ship/Shore Safety Check List.

The information in this check list formalises the cooperation between the vessel and the crew on shore. All relevant points should be agreed on before starting the operation. HSE Safety Data Sheets (SDS) are available if requested, and any hazards related to the handling of certain goods should be discussed before the operation begins.

The agreements that are made via this document and others are valid for as long as the vessel is berthed at Fjord Base. Any changes or exemptions to this agreement must be made in writing.

### 6.3 Communication during loading and unloading

In able to perform a safe operation, it is of vital importance that communication is maintained during loading/unloading operations. If there is a situation during loading and unloading where it is necessary to perform an emergency stop, you must notify the crew via UHF/VHF radio on the agreed frequency, or via other agreed methods.

If an emergency occurs during bulk/bunker operations, all pumps must be stopped immediately. A resumption of the operation is not to take place before all parties have agreed to this.

## 7. Distribution of responsibilities

### 7.1 Jurisdiction

Norway has signed a letter of intent regarding Port State Control. This means that inspections of the terminal and vessels may occur. The purpose of these inspections is to uncover whether the vessels/terminal meet all relevant national and international standards.

### 7.2 Conditions for acceptance

The captain of the vessel is responsible for ensuring that all vessel operations are correspondent with governmental requirements, best possible practise and within relevant standards. Arrival of vessels must be approved by Saga Fjordbase AS according to current routines for reservations.

### 7.3 Distribution of responsibilities

The responsibility for a secure completion of operations when vessels are berthed at Fjord Base is with the vessel's captain and the representative from Saga Fjordbase AS, or the responsible representative for other companies who are operating in the port area.

**A safe job is best performed through good cooperation, coordination and communication between all parties involved. All operations are performed through mutual understanding.**

The crew of the vessel should be made aware that the responsibility for loading and unloading is with the captain alone. The vessel's crew are responsible for operating valves and to ensure a safe connection between all transmission equipment going in to the vessel's tanks/cargo hold.

The vessel's personnel should be made aware that the responsibility for unloading products and emissions from oil products is with the captain.

## 8. Bulk and bunker operations

### 8.1 General information

All operations at Fjord Base's quays are to be performed according to current regulations and recommendations as stated in relevant documents such as ISGOTT ("International Safety Guide for Oil Tankers and Terminals") and GOMO ("Guidelines for Offshore Marine Operations"). Safety zones when bunkering is normally 20m away from vessels, and all other activity must be stopped unless other agreements are made.

## 8.2 Hoses and couplings

When mooring is completed at Fjord Base's terminals, vessels are to prepare hoses for unloading. It is the responsibility of the vessel to pressure test its own hoses according to the ISGOTT standard. Certificates must be available for a check before starting the operation.

The crew of the vessel must also make sure that hoses are placed and connected/disconnected responsibly. Personnel from Saga Fjordbase or bulk suppliers at the base must make sure that the hoses are connected/disconnected on shore. The operator's hoses are normally used for deliveries, and the rules of responsibility are the same when it comes to controlling the hoses (owner), as well as the responsibility on board the vessel.

## 8.3 Bulk/bunkering rate

Maximum rate of loading and unloading is decided before starting the operation during the "pre-work conversation". This rate must never exceed the lines' maximum flow rate.

Delivery rate must also be established before starting, and the need for additional measures must also be taken into account when products defined as static accumulators are being handled. If necessary, an agreement should be made on procedures for topping the tank on shore/vessel.

## 8.4 Controls

Unless exceptions are agreed on, the vessel must report amount of product loaded/unloaded per hour, every hour. The terminal will compare these with corresponding reports from ashore. If major deviations in these numbers occurs, the operation will be stopped, and the causes are registered before continuing/completing the operation.

## 8.5 Criteria for work in various weather conditions

### **Full stop in crane operations and bulk operations**

<b>Wind speed</b>	According to crane-specific limitations
<b>Lightning</b>	All operations involving bulk/bunker operations must be stopped when there is a risk of lightning, despite of any IG systems in place. Tank openings, ventilation systems and valves must be closed. Crane operations will operate according to crane manuals and Saga Fjordbase's procedures.
<b>Wave length</b>	If waves are causing so much movement in the vessel that work can no longer continue within an acceptable safety level, the operation should be stopped and releasing the vessel from the quay will be considered. This point applies regardless of wind speed as stated above.

### 8.6 Emergency stop

Emergency stops when delivering MGO (diesel), methanol and LNG is via a manual, electric emergency stop switch, delivered from ashore to the vessel and operated by the vessel. This emergency stop will activate a valve placed on the tanks on shore. If this is used, the person responsible for the terminal must be notified immediately via UHF radio.

Emergency stop for mud loading, base oils, brine and solids is via radio contact and manual valve handling.

### 8.7 Secondary vessels – mooring alongside other vessel

No vessels are permitted to lie on the outside of another vessel and perform activity without an approval in advance from Saga Fjordbase's Logistics Centre. Transfer of cargo, bulk and bunkers between vessels (ship-to-ship) is not permitted at Fjord Base's quays, or in immediate vicinity of these.

Any exemptions from this regulation should be applied for and sent to Saga Fjordbase's Logistics Centre no later than 72 hours prior to a scheduled operation. Reason for application, as well as risk analysis and measures to reduce operational risks must be stated clearly in the application.

### 8.8 Drinking water (FW)

Drinking water is offered at quay A, B, C, D, F and G. Ordered via Logistics Centre, port office, email [kaikontor@incgruppen.no](mailto:kaikontor@incgruppen.no). If water samples are required, this must be pre-ordered (remember to include the quality/quantity of the sample). Saga Fjordbase collects water samples once a month, and the results are distributed to operators, vessels who are here regularly and others who require these samples.

### 8.9 LNG

Fjord Base has its own LNG terminal for deliveries to vessels. Saga Fjordbase is the operator. The location for bunkering is quay D. Reservation of LNG is via SafeSeaNet as well as Bulk Service: +4799405821.

### 8.10 Smoking and use of matches/lighters

Smoking at the base is subject to Norwegian law, in addition to the regulations stated in the ISGOTT standard. During loading of bunker products, no matches/lighters or other flammable sources are allowed. It is the responsibility of the leaders on the vessels and on shore to make sure that this rule is kept.

Violations of these rules can mean that operations will be stopped and vessels forced to leave the quay. Fjord Base reserves the right to forbid smoking at any given time, also outdoors on vessels who are berthed in the port area.

#### 8.11 Portable electrical equipment, including phones

Only approved EX equipment can use during bunker operations, according to the ISGOTT standard.

## 9. Overview and information about Fjord Base

For more information on Fjord Base, visit our homepage:

[www.incgruppen.no](http://www.incgruppen.no)

Updated maps of Fjord Base: <https://www.incgruppen.no/tjenester/fjordbase5/fjord-base-as/kart-over-leietakere>

Updated information and overview of the port area:

<https://www.incgruppen.no/tjenester/fjordbase5/fjord-base-as/kai-og-isps-avgift/>