SHIP TO SHIP LNG BUNKERING ALONGSIDE A TERMINAL

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When a ship with LNG propulsion is alongside a terminal and it attend to do a ship to ship LNG bunkering in Rotterdam:

- both ships will comply with IMO regulations;
- the Port Authority have checked if the LNG bunker vessel is prepared to do a safe LNG bunkering;
- the Port Authority have checked the nautical safety on the berth;
- the Port Authority have checked the safety distance to populated areas (external safety);
- the Port Authority will control other ships activities (VTS);
- the LNG bunkering is operational prepared and checked (IAPH Checklists and enforcement);
- simultaneous Operations during the LNG Bunkering are checked and controlled (ISO + SGMF);
- the Port Authority has checked the terminal preparation.
Process

STS LNG-bunkering: Procedure for licensing

[Flowchart showing the process steps: Application, Port Bye Laws Application format, SHIPS Safe?, LNG bunkering activity Safe?, Simultaneous operations safe?, Nautical location Safe?, Mooring Safe?, Terminal preparedness OK (i.e.), External safety, distance to populated area Safe?, Compliant with regulations?, License, LNG bunker operation, IAPM LNG, IAT Audit, Reality Check, Regular Enforcement.]

Application

Ship Safety

Operational Safety

SIMOPS

Nautical Safety

Terminal Preparation

External Safety and Compliance

Operational Safety

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Both ships will comply with IMO regulations (IGF and IGC)
The Port Authority have checked if the LNG bunker vessel is prepared to do a safe LNG bunkering;
The LNG bunkering is operational prepared and checked (Checklists);

The Port Authority has checked the terminal preparation.

IAPH-CMF
Ship to Ship LNG bunker checklist

LNGbunkering.org

3 columns for a terminal with a responsibility for the LNG bunkering

The terminal will be informed with a terminal information sheet

2 columns for a terminal without a responsibility for the LNG bunkering
The Port Authority have checked the nautical safety on the berth; The Port Authority will control other ships activities;
The Port Authority have checked the safety distance to populated areas (external safety);
Simultaneous Operations during the LNG Bunkering are checked and controlled;

- Credible scenario
- Gas dispersion study or BASIL
  → Safety zone
- HAZID (vice versa)
- Safety zone
- Control
The Port Authority has checked the terminal preparation.

- **Preparation:**
  - LNG Awareness
  - Preparedness of the terminal incident response organization
  - Situational Plan + safety boundaries
    - Quay plan
    - Fire water supply + hydrants
    - ER tasks plan
    - Evacuation plan
    - Education & training & equipment.

- **Operational:**
  - Information sheet
  - Informed personal
  - Communication procedures
  - SIMOPS awareness
  - Dedicated watch on tasks
  - Control zones
  - Knowledge of alarm signals
  - Security / precaution zone

In Rotterdam no impact on the terminal environmental license, WM is not applicable for STS, we use the two columns checklist.
Thank you for your attention

Questions?

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