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Vessel Navigation Regulations of the Port of Kaohsiung

Article 1

These *Regulations* have been formulated to strengthen navigational safety of vessels in the harbor areas of the Port of Kaohsiung, to maintain the safety and order of traffic in waterways, to protect the marine environment of surrounding waters, and to protect the safety of vessels, facilities, human life and property.

Article 2

Vessels navigating in the harbor areas of the Port of Kaohsiung must observe these *Regulations* and the *Port of Kaohsiung Vessel Traffic Service Manual*. Where no provisions have been made in these *Regulations* and the *Manual*, the *Convention on the International Regulations for Preventing Collisions at Sea 1972* (COLREGs) is to be followed, as well as its rules on the display of signals lights, signal marks, and lights.

Article 3

See Annex 1 for the main navigation channels of this Port. When harbor area working crafts, ferries, sightseeing boats, fishing boats etc. and boats or rafts with a draft of less than 3 meters, that do not report to the VTS but

accept inbound and outbound control, navigate in the main channels they must not interfere with the navigation of vessels that have already been approved for port entry or departure.

Vessels must not overtake or interfere with the navigation of other vessels.

This does not apply when the VTS has given relevant instructions.

The turning basin of the Second (South) Harbor Entrance is to be always kept clear to provide ample water area for inbound and outbound vessels to turn around or wait. A vessel must not randomly stop in the turning basin, or impede the maneuvering of inbound and outbound vessels, unless the vessel gets permission from the inbound or outbound vessel and the VTS.

Article 4

Vessels entering from the First (North) Harbor Entrance must not overtake or cross in front of other vessels and keep a distance of at least 0.5 nautical miles, when proceeding from the starting line of the seaward two-way traffic route to the inside of the breakwater and then up to the Jong Shyn Shun Rong dock.

Vessels entering from the Second (South) Harbor Entrance must not overtake or cross in front of other vessels, when proceeding from the starting line of the seaward two-way traffic route to the inside of the breakwater and then up to the line between Wharf No.115 and Wharf No.111. They must keep a safe distance from other vessels as follows:

Vessels of 20,000 GT and above: at least 1 nautical mile

Vessels of less than 20,000 GT and more than 500 GT: at least 0.5 nautical miles

Vessels of less than 500 GT: at least four times their own length

The two-way traffic route at the First and Second Harbor Entrance is a controlled area that must be always kept clear. Without permission from the VTS vessels must neither enter nor drift into the two-way traffic route. Vessels must not navigate side-by-side in the two-way traffic route and must leave this navigation channel immediately when receiving a call to leave from the VTS.

Article 5

Before entering or leaving port, vessels must apply with the VTS for a position in the inbound or outbound sequence, and they must enter and leave the port according to the VTS traffic arrangements.

Vessels of less than 500 GT and more than 20 GT that are not equipped with VHF radio must follow the instructions on the VTC signal board when entering or leaving port. During entry and departure, they must keep a distance from other vessels of at least four times their own length. Small vessels of less than 20 GT must navigate near the outer limit of the channel and reference the VTC signal board and be aware of wake. See Annex 2 for the meaning of the signals displayed on the signal board.

Article 6

Vessels navigating in the harbor area of the Port of Kaohsiung must pay attention to harbor area announcements, the navigation channel's surroundings, the weather etc. They must proceed with safe speed, not sail side by side with other vessels nor randomly overtake other vessels or interfere with their safe navigation. This does not apply when following instructions from the VTS. Vessels must immediately give way or pass at slow speed when meeting other vessels engaged in diving / surveying / dredging / mooring buoy repair activities, and other overwater and underwater operations.

Article 7

Vessels passing waters above the Cross-Harbor Tunnel must maintain under keel clearance of at least 0.5 meters, sliding across with engines stopped.

Article 8

It is principally forbidden to sail across anchorage areas without permission. Incoming vessels anchored at an anchorage may sail into the two-way traffic route from the anchorage and enter the port after the VTS controller

grants "approval of port entry". When outgoing vessels proceed in the two-way traffic route under VTS control, vessels waiting at anchorages must not sail across the anchorage limits into the two-way traffic route, occupying space.

Article 9

Vessels navigating in the channel must make contact, on their own initiative, with vessels that are carrying out towing operations, and give way.

Article 10

Dangerous goods carriers berthing at Wharfs No. 102-105 of CPC Corporation's Dalin Refinery must enter and leave the port via the Second (South) Harbor Entrance.

Article 11

Inside the port area, anchoring and drifting is prohibited in areas that are not anchorages.

Except for emergencies, vessels must not drop anchor in channels or turning basins. When a vessel drops anchor due to an emergency or poor visibility, it must display signal lights and shapes, use sound signals, and report immediately to the VTS.

Article 12

Under abnormal weather conditions, the entry and departure of vessels is controlled in accordance with the *Criteria for Controlling the Entry and Departure of Vessels at the Port of Kaohsiung* (see Annex 3).

Article 13

Vessels carrying out towing operations must apply for prior approval with the competent authorities and the port administration agencies responsible for the respective operations, based on the towed object (such as vessel, float etc.). The approved documents must be faxed to the VTS one hour before departure or arrival for the vessel's release.

Towing operations must be carried out between sunrise and sunset.

Article 14

When navigating in the VTS Area, vessels that are equipped with VHF radio must maintain continuous listening watch on the assigned channel (inside the harbor north of the Chienchen River Channel 14, south of the Chienchen River Channel 12, outside the harbor Channel 11 and the international calling and distress Channel 16, as well as Channel 9 for the announcement of Kaohsiung Port information) to be able to respond to emergencies and communicate maneuvers. The crew must not use the radio channels for chatting and must be prepared to answer questions from the VTS anytime. The master or pilot must immediately report to the VTS when relevant articles are violated to prevent endangering human life/property or because of an emergency that threatens port safety, or when they detect any dangerous or illegal and abnormal conditions.

Article 15

When vessels wait to berth for safety inspections, when they unberth after safety inspections to wait for departure, and when they enter or leave the safety inspection station, they must not occupy or stay in the main channel and the turning basin in a transverse position to prevent interfering with the safe navigation of other vessels.

Article 16

Dangerous cargo carriers entering or leaving the port must apply for a guiding boat to lead their way ahead and take special safety measures. If the Maritime and Port Bureau has approved exemption from compulsory pilotage, they may apply to be exempted from hiring a guiding boat.

Article 17

Incoming vessels with a length of more than 150 meters that are berthing at Wharfs No.30 to 35 and Wharfs No. 49 to 57, must move into their berth in the direction of port entry, and are not allowed to turn around in front of their

berth.

Article 18

Vessels temporarily drifting outside the harbor while waiting for a berth must not drift in controlled waters and anchorage areas outside the channel within 5 nautical miles of the breakwater. They must also report in advance to the VTS.

Article 19

Sightseeing boats must travel on the permitted sailing route alongside the pier at slow speed without entering the main channel. While navigating, the boats must also be aware of the propeller wash and ship wake of various kinds of vessels. Vessels must avoid altering course directly at the end of wharfs. They may turn only after confirming that there are no vessels coming from either side and must be careful to avoid collision. Speeding is strictly prohibited. During the entire voyage listening watch on VHF radio must be maintained (north of the Chienchen River Channel 14, south of the Chienchen River Channel 12).

Article 20

Fishing boats entering or leaving the port or navigating in the inner harbor must proceed along the outer limit of the channel and avoid impeding the passage of vessels navigating within the main channel.

Smaller vessels and rafts proceeding along a channel shall keep near to the outer limit of the channel. Without permission from the VTS, they are not allowed to cross in front of the bow of vessels entering or leaving the port.

Article 21

Vessels entering or leaving the Port of Kaohsiung at the Second (South) Harbor Entrance shall change direction by turning continuously at practicable and safe speed, as much as possible or completely inside the turning basin. In doing so, they shall consider the prevailing weather

conditions, the vessel's type, age, gross tonnage, draft, maneuvering equipment etc. as well as tug deployment. But vessels of more than GT 80,000 or with a vessel length of more than 300 meters entering or leaving the channel linking Wharf No. 70 and Wharf No. 115 must completely turn inside the turning basin at practicable safe speed and with the help of suitable tugboats. They may only proceed after aligning their course with the channel. Before they have completely turned, the vessels behind them must avoid entering the south breakwater (old south breakwater)

Article 22

When vessels encounter poor visibility due to bad weather while entering/leaving the port or navigating inside the port, and when the pilot or tug master has doubts about the other side's respective position and navigation data, they must immediately request such information from the VTS.

Article 23

After the pilot boat (crew transfer boat) has taken the pilot to the vessel, it must leave immediately while keeping a safe distance from the vessel.

Article 24

These Regulations are implemented on the date of promulgation.

Annex 1

The Main Channels of the Port of Kaohsiung

First (North) Entrance Channel

- a) The two-way traffic route begins at the Kaohsiung Lighthouse and has a length of 2.5 nautical miles. Its northern boundary extends outward in a direction of 300 degrees from the light pole at the tip of the north breakwater, and the southern boundary extends outward in a direction of 270 degrees from the light pole at the tip of the south breakwater.
- b) The northern boundary of the outbound channel of the Traffic Separation Scheme (TSS) extends outward in a direction of 300 degrees from the light pole at the tip of the north breakwater to the northern end of the two-way traffic route for a length of 1 nautical mile, measured from the end of the two-way traffic route. The southern boundary of the TSS inbound channel extends outward in a direction of 270 degrees from the light pole at the tip of the south breakwater to the southern end of the two-way traffic route for a length of 1 nautical mile. In the middle a separation line divides the inbound and outbound traffic flows. The separation line extends outward in a direction of 285 degrees from the center point on the curved outer edge of the two-way traffic route for a length of 1 nautical mile.
- c) The pilot station is located at the meeting point of the inbound channel and the two-way traffic route, and 2.5 nautical miles away from the Kaohsiung Lighthouse.

Second (South) Entrance Channels

- a) The two-way traffic route has a length of 3 nautical miles, measured from the VTC tower. Its northern boundary extends outward in a direction of 270 degrees from the light pole at the tip of the north breakwater and the southern boundary extends outward in a direction of 250 degrees from the light pole at the tip of the south breakwater.
- b) The northern boundary of the TSS outbound channel extends outward from the northern boundary of the two-way traffic route in a direction of

270 degrees, for a length of 2 nautical miles, measured from the end of the two-way traffic route. The southern boundary of the TSS inbound channel extends outward in a direction of 250 degrees from the light pole at the tip of the south breakwater to the southern end of the two-way traffic route for a length of 1.7 nautical miles, measured from the end of the two-way traffic route. In the middle a separation line divides the inbound and outbound traffic flows. The separation line extends outward in a direction of 260 degrees from the center point on the curved outer edge of the two-way traffic route for a length of 1.8 nautical miles.

- c) The pilot station is located at the meeting point of the inbound channel and the two-way traffic route, and 3 nautical miles away from the VTC tower.

Anchorage Area West Side Channel

- a) The northbound channel is 0.8 nautical miles wide and 1.2 nautical miles long and extends in a direction of 343 degrees.
- b) The southbound channel is 0.8 nautical miles wide and 1.2 nautical miles long and extends in a direction of 163 degrees.
- c) The separation zone has a width of 0.5 nautical miles.

Inner Harbor Channel (Main Channel, Secondary Channel)

- a) The channel begins 500 meters outside of the First (North) Harbor Entrance breakwater and enters the port in a direction of 105 degrees. It gradually narrows from a width of 98 meters to 80 meters before gradually widening again to 160 meters from the signal station. After passing mooring buoy No. 23 the channel splits into a left and a right channel (main, secondary channel). The right channel (main channel) runs in a direction of 150 degrees with a width of 100 meters and widens to 200 meters after reaching the estuary of the Chienchen River. After passing the turning basin at the Second (South) Harbor Entrance in a direction of 125 degrees it widens to 250 meters to end at Wharf No. 97. The left channel (secondary channel) maintains its direction and width up to Wharf No. 22 where it turns in a direction of 150 degrees to end at Wharf No. 27.

- b) The channel begins 500 meters outside the breakwater of the Second (South) Harbor Entrance and enters the port in a direction of 80 degrees with a width of 170 meters. After passing the VTC tower it meets the right channel (main channel) at the turning basin of the Second (South) Harbor Entrance.

Annex 2

Meaning of the Signal Boards at the Port of Kaohsiung

The signal board for vessels entering and leaving at the First (North) Harbor Entrance is located on the First Signal Station. The signal board for vessels entering and leaving at the Second (South) Harbor Entrance is located on the tower of the Vessel Traffic Service (VTC). The signal boards display each one of the four letters "I, O, F, S". They have the following meaning:

"I"(INTO): means that vessels approved for entry are already proceeding within the channel, outgoing vessels are not allowed to pass through.

"O" (OUT): means that vessels approved for departure are already proceeding within the channel, incoming vessels are not allowed to pass through.

"F" (FREE): means that at this time there are no vessels of more than 500 GT entering or leaving the port, smaller vessels of less than 500 GT may pass through to enter the port, depending on the situation.

"S" (SHUT): means that traffic at the port is presently restricted so that all vessels are prohibited from entering or leaving the port.

Annex 3

Criteria for Controlling the Entry and Departure of Vessels at the Port of Kaohsiung

April 14, 2023, Kao Kang Kang Tzu No. 1126591189

1. Definition of Terms:

- 1.1 During typhoon: refers to the period between the issuance of a typhoon sea warning by the Central Weather Bureau until 48 hours after the sea warning has been lifted.
- 1.2 During ordinary times: refers to all times that are not typhoon times.
- 1.3 Basis for determining wind force: At the First (North) Harbor Entrance the number measured by marine meteorological instruments at the First Signal Station applies, at the Second (South) Harbor Entrance the number measured by marine meteorological instruments at the VTC applies.
- 1.4 Average wind force: refers to the average wind force value during a 15-minute interval.

2. Criteria for Controlling the Entry and Departure of Vessels:

- 2.1 During ordinary times: when the wind force measured at the First or at the Second Harbor Entrance reaches an average of 7 or above on the Beaufort Scale, or when the height of offshore waves reaches 3 meters or above, all vessel entries and departures via the respective harbor entrance are to be suspended.
- 2.2 During typhoon:
 - 2.2.1 First entrance: when the wind force is higher than 5 and less than 7 on the Beaufort Scale, vessel entry and departure is to be suspended based on one of the following criteria.
 - 2.2.1.1 Suspension of entry:
 - 2.2.1.1.1 Vessel types:
 - A. Oil/chemical tanker, vessels registered in Taiwan, sailing domestic routes, and being used for construction inside the port.

B. Other vessels: It is up to the shipping company to review whether the vessel's condition meets the following requirements.

- a) The draft at the stern or bow reaches at least 8 meters.
- b) Gross tonnage of 10,000 GT or more.
- c) Vessel speed during port entry is less than 9 knots.

2.2.1.1.2 Offshore waves at the First Harbor Entrance are 2 meters high or more; offshore waves at the Second (South) Harbor Entrance are 3 meters high or more.

2.2.1.1.3 Recommendations by the pilot office.

2.2.1.2 Suspension of departure: Vessel types: vessels sailing domestic routes and being used for construction inside the port.

2.2.2 Second (South) Harbor Entrance: to be handled as described in 2.1 (during ordinary times) of these Criteria.

2.3 During typhoon:

Vessels that are exempt from pilotage during ordinary times may hire a pilot, when the port entry conditions are met or enter the port on their own account after the master has signed an affidavit.

2.4 When entry and departure via the First Harbor Entrance are suspended but time slots for entry and departure are still open at the Second Harbor Entrance, then the master may apply for entry or departure via the Second Harbor Entrance.

2.5 When, after port entry and departure have been suspended at both harbor entrances, the wind force drops to 6 on the Beaufort scale and does not increase for 1 hour, departure operations are to be reopened first. Pilots will be allowed to depart for pilotage into the port via the First Harbor Entrance when the wave height decreases to less than 2 meters, and via the Second Harbor Entrance when the wave height drops to less than 3 meters. Once pilots can safely board vessels, inbound and outbound operations will be fully restored.

2.6 When the pilot finds that the actual sea weather (wind force, current

speed, visibility, and wave height etc.) is bad and seriously affects vessel maneuvering, they must immediately notify the VTS via radio. When necessary, the pilot office should recommend the suspension of the vessel's entry or departure.

3. During typhoon and during ordinary times: When visibility reaches the following conditions, port entry and departure is to be suspended:

3.1. Vessels of 500 GT and above:

3.1.1 First Harbor Entrance: visibility below 1000 meters (that is the distance between the first signal station and the First Harbor breakwater entrance or between the first signal station and the Jong Shyn Shun Rong dock).

3.1.2 Second Harbor Entrance: visibility below 1 nautical mile (1,852 meters), that is the distance between the VTC tower and the Second Harbor breakwater entrance or between the VTC tower and the point where Wharf No. 79W and Wharf No. 80W meet.

3.2 Vessels of less than 500 GT: Visibility below 500 meters.

3.3 Poor visibility, the pilot office recommends suspending port entry and departure.

4. Other Special Case Applications: (If navy ships, dredgers, research vessels, or other vessels need to carry out operations near the port, in case of marine incidents/sea accidents etc.), controls on the entry and departure of vessels may be implemented for coordination, after permission has been granted.

5. When offshore waves higher than 2.5 meters are measured by the Xiao Liuqiu Buoy or the wave and current profiler of the Institute of Transportation, anchored vessels under 10,000 GT must leave the anchorage areas. When the waves are higher than 3 meters, the anchorage areas must be cleared.