Guide Letter to Shipowners on Bonded Oil Bunker Supply in Zhoushan

## (2024 Edition)

Zhoushan is the main maritime open gateway to the world for the eastern coast of China and the Yangtze River basin. Six of the seven international main routes in and out of China pass through Zhoushan waters. Nearly 110,000 international vessels steam through Zhoushan waters, and more than 24,000 international vessels call Zhoushan annually. Whist, Zhoushan has more than 17 million cubic meters of bonded oil depot and can cover a wide range of bonded oil bunker scenes, such as inner and outer anchorage in port, berthing call in port, and cross-custom port area. With the most complete bunker oil types and the most transparent prices in China, Zhoushan is the most efficient and comprehensive maritime service port in China, the first largest bunker supply port in China and the fourth largest bunker supply port in the world currently. In order to provide international shipowners with more convenient guide information on bunker supply in Zhoushan, we have compiled coordinates, navigational requirements and meteorological information of the main bunker supply anchorages in Zhoushan into a booklet for reference.

1. Xiazhimen North Anchorage

- 1.1 Anchor position coordinates.
- 1# 29°46′18.0″N; 122°20′40.0″E;
- 2# 29°46'18.0"N; 122°21'50.0"E;
- 3# 29°46′00.0″N; 122°23′00.0″E;

1.2 Xiazhimen North Anchorage navigation and mooring requirements.

1.2.1 Bunker barge should sail Bogumen or Fulimen Channel when steaming in and out of port.

1.2.2 Once completion of bunker operation in Xiazhimen North Anchorage and prior

to continue to proceed to Tiaozhoumen Anchorage for bunkering, bunker barges should submit requests in advance to the Ningbo-Zhoushan VTS. After approved, bunker barge could sail cross the deep-water channel via eastward of Buoy 5 # (29 ° 43'17"N; 122 ° 24'72"E) and Buoy 6 # (29 ° 43'04"N; 122 ° 24'03"E) to southward and shall not obstruct the inbound and outbound vessels.

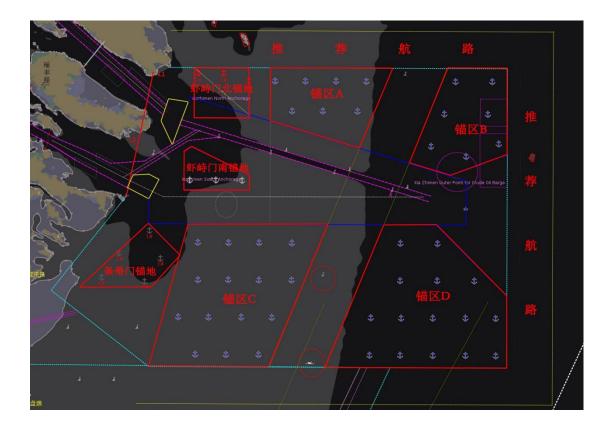
1.2.3 Inbound vessels previously navigated within Public Routes should navigate from the North side of Latitude  $29^{\circ}$  46.5 ' N into Xiazhimen North Anchorage. Inbound vessels previously moored in the North side of Latitude  $29^{\circ}$  48 ' N could navigate directly into Xiazhimen North Anchorage. Once completion of bunker operation, vessels should depart along the North side of Latitude  $29^{\circ}$  46.5 ' N.( As shown in the figure below)

1.2.4 Vessel is strictly prohibited to turn northward directly to Xiazhimen North Anchorage without approval when steaming out of port via Xiazhimen channel. Vessel should sail along southward of the deep-water channel to eastward firstly. After passed the deep-water channel Buoy 3 #, Vessel should submit requests to Ningbo-Zhoushan VTS for approval to cross the deep-water channel to northward, and then turn westward to Xiazhimen North Anchorage to receive bunker, or continue to sail northward to moor and wait in the water where is northward of Latitude line (29 ° 48' N).

1.2.5 Vessel when steaming out of port via Tiaozhoumen channel should sail to east along the southward waters of the recommended route. After passed the deep-water channel Buoy 3 # (29°42′40″N; 122°27′65″E), Vessel should submit requests to Ningbo-Zhoushan VTS to cross the deep-water channel to northward, and then turn westward to Xiazhimen North Anchorage to receive bunker, or continue to sail northward to moor and wait in the water where is northward of Latitude line (29°48′ N).

1.2.6 Bunker barge should moor in the waters which is 1 nautical mile away from north boundary of Xiazhimen North Anchorage when idle without bunker operation.





1.3 Bunker operation restrictions.

1.3.1 Wind speed from Zhoushan Oceanic Meteorological Observatory forecast is not allowed to exceed 13.8m/s (Beaufort Wind Force Scale level 6), whist coastal wind speed from Zhoushan Meteorological Bureau forecast is not allowed to exceed 17.1m/s (Beaufort Wind Force Scale level 7).

1.3.2 The maximum wave height for bunker operation is not allowed to be more than 1.5m. The optimum wave height for bunker operation is not allowed to be more than 1.0m. The visibility of ship-to-ship berthing, ship-to-ship unberthing and night ship-to-ship bunker transfer operation requests more than 1 nautical mile.

1.3.3 Night ship-to-ship berthing, night ship-to-ship unberthing and night ship-to-ship bunker transfer operation are available in this anchorage.

1.4 Precautions.

1.4.1 Xiazhimen North Anchorage is a dedicated anchorage for bonded oil bunkering, and scheduling plan arrangement is in the charge of Bonded Fuel Dispatch Service Center of Zhoushan Port Comprehensive Bonded Zone.

1.4.2 Bunker barge should keep the display of AIS available and the effective watch of 08 VHF channel. Prior to entering anchorage, bunker barge should report movements to Ningbo-Zhoushan VTS until approved; After entering anchorage, bunker barge should report movements to Ningbo-Zhoushan VTS when bunker supply starts after ship-to-ship berthing at Vessel and bunker supply ends after ship-to-ship unberthing at Vessel. During ship-to-ship bunker transfer operation, bunker barge should make engine on standby, take navigational watch, keep the main engine available at any time, strengthen precautions and check the cable stress at all times.

1.4.3 Vessel should keep the display of AIS available and the effective watch of 08 VHF channel and follow the management of Ningbo-Zhoushan VTS. Prior to entering anchorage, Vessel should submit requests for anchor position to Ningbo-zhoushan VTS until approved ; Prior to mooring when arrived at the designated water, Vessel should proactively call Ningbo-Zhoushan VTS to check the anchor position until

approved to drop anchor ; Vessel should report movements to Ningbo-Zhoushan VTS when after anchored and before anchor aweigh after completion of ship-to-ship bunker transfer operation. During ship-to-ship bunker transfer operation in the anchorage, Vessel should make engine on standby, take navigational watch, keep the main engine available at any time, strengthen precautions to avoid anchor dragging. Once completion of bunker operation, Vessel should depart in time to provide convenience for the following Vessels in line.

1.4.4 Bunker barge should strictly implement the procedure and requirements of the dangerous goods on board declaration and ship-to-ship bunker transfer operation reports.

1.4.5 For international vessel initial calling at Zhoushan for bunker supply, agency should take the initiative to contact with foreign vessels to confirm the planned sailing routes of entering and exiting the anchorage, must propose corrections for the wrong routes in time, and provide tracking and guiding services throughout the whole process effectively. At the same time, if international vessels have any uncertainty or lack of understanding of the route and navigation requirements for entering and exiting the anchorage, they should contact the relevant agent in advance for consultation and clarification.

## 2. Tiaozhoumen Anchorage

- 2.1 Anchor position coordinates.
- 1# 29°39′58.0″N; 122°18′28.0″E;
- 2# 29°39′03.0″N; 122°17′04.0″E;
- 3# 29°38′51.0″N; 122°18′58.0″E;
- 4# 29°38′04.3″N; 122°16′26.8″E;
- 5# 29°37′09.2″N; 122°18′24.4″E;

## 2.2 Tiaozhoumen Anchorage navigation and mooring requirements.

2.2.1 Bunker barge should sail Tiaozhoumen channel when steaming in and out of port.

2.2.2 Inbound vessels previously navigated within Public Routes should keep course until reaching the area bound by Latitude 29°37'N and Latitude 29°43'N and turn directions. Crossing anchoring areas due to early or late altering is not allowed. Thereafter, inbound vessels should enter from the North side of the Recommended Route outside of Tiaozhoumen. Once completion of bunker operation, vessels should depart in sequence along the South side of the Recommended Route outside of Tiaozhoumen. (As shown in the figure below)

2.2.3 Outbound vessels to use Zhejiang Costal East Route should keep course until reaching eastward of Longitude  $122^{\circ}$  34' E to turn directions. Outbound Vessels to use Outer Route should keep course until reaching eastward of Longitude  $122^{\circ}$  44' E to turn directions. Vessels with no intention to use any Public Routes should keep course until they are 10 nautical miles away from eastward of Outer Route to turn directions.

2.2.4 Vessel in line is to be recommended to moor at Section C of 1# Management Area with draught below 14m, and at Section D of 1# Management Area with draught above 14m. Vessel moored at Section C of 1# Management Area can navigate directly into Tiaozhoumen anchorage, while vessel moored at Section D of 1# Management Area should navigate into Tiaozhoumen anchorage along the Recommended Route out of Tiaozhoumen channel entrance.

2.2.5 Outbound vessel via Xiazhimen Channel or Tiaozhoumen Channel can navigate directly to Tiaozhoumen anchorage for bunkering or navigate to Section C or Section D of the 1# Management Area to moor and wait, but shall not cross the Xiazhimen South Anchorage.

2.2.6 Bunker barge should moor at Section C of 1# Management Area when idle without bunker operation.

2.3 Bunker operation restrictions.

2.3.1 Wind speed from Zhoushan Oceanic Meteorological Observatory forecast is not allowed to exceed 13.8m/s (Beaufort Wind Force Scale level 6), whist coastal wind speed from Zhoushan Meteorological Bureau forecast is not allowed to exceed 17.1m/s (Beaufort Wind Force Scale level 7).

2.3.2 The wave height in the anchorage under bunker operation is not allowed to be more than 1.5m.

2.3.3 The visibility of ship-to-ship berthing, ship-to-ship unberthing and ship-to-ship bunker transfer operation requests more than 1 nautical mile.

2.4 Precautions.

2.4.1 Tiaozhoumen Anchorage is a dedicated anchorage for bonded oil bunkering, and scheduling plan arrangement is in the charge of Bonded Fuel Dispatch Service Center of Zhoushan Port Comprehensive Bonded Zone.

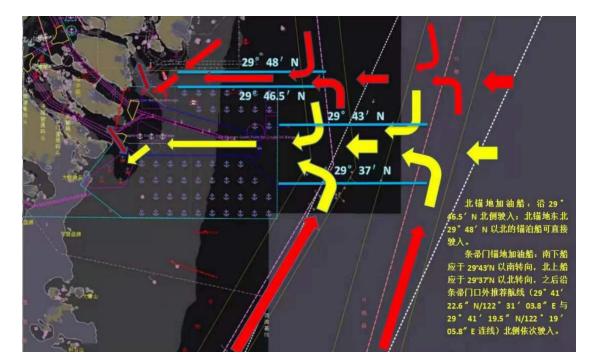
2.4.2 Vessel when steaming out of Tiaozhoumen channel entrance with draught below 18m should enter and exit the anchorage along the recommended route; Vessel when steaming out of Tiaozhoumen channel entrance with draught above 18m should enter and exit the anchorage along the Xiazhimen deep-water channel.

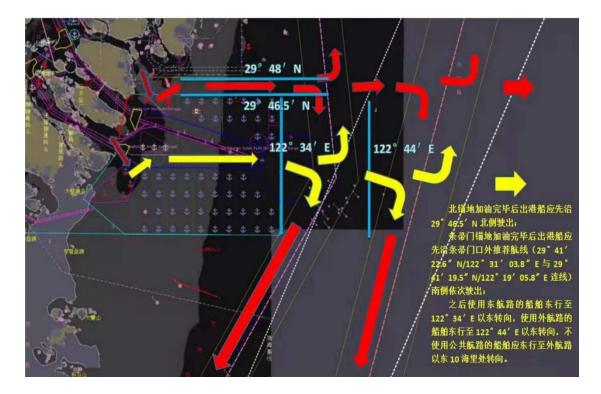
2.4.3 Dragging risk exists in 1# anchor position of Tiaozhoumen Anchorage. It is forbidden to supply bunker during the heavy tide period (two days before and three days after the 1<sup>st</sup> and sixteenth day of the lunar calendar month); Vessel should especially strengthen on mooring watch via VHF when moored in the other period.

2.4.4 Ship owner, ship operator or ship agent should submit requests for Shallow Navigation Plan or Channel Navigation Plan one day in advance in VTSMP "Vessel Traffic Service Management Platform" of Zhejiang Maritime Bureau for Vessel with draught above 16 meters to enter or exit Tiaozhoumen Anchorage. It is requested to apply for Shallow Navigation Plan for vessel with draught above 16m and Channel Navigation Plan for vessel with draught above 16m.

2.4.5 Bunker barge should strictly implement the procedure and requirements of the dangerous goods on board declaration and ship-to-ship bunker transfer operation reports.

2.4.6 For international vessel initial calling at Zhoushan for bunker supply, agency should take the initiative to contact with foreign vessels to confirm the planned sailing routes of entering and exiting the anchorage, must propose corrections for the wrong routes in time, and provide tracking and guiding services throughout the whole process effectively. At the same time, if international vessels have any uncertainty or lack of understanding of the route and navigation requirements for entering and exiting the anchorage, they should contact the relevant agent in advance for consultation and clarification.





(Chart4)

3. Xiushan East Anchorage

3.1 Area bounded by following Coordinates.

- A、 30°10′15.0″N; 122°13′19.0″E;
- B、 30°10′15.0″N; 122°17′18.0″E;
- C、30°07′54.0″N; 122°13′19.0″E;
- D、30°07′54.0″N; 122°17′18.0″E;

3.2 Bunker operation restrictions.

3.2.1 Wind speed from Zhoushan Oceanic Meteorological Observatory forecast is not allowed to exceed 17.1m/s (Beaufort Wind Force Scale level 7) and is not allowed to exceed 13.8m/s (Beaufort Wind Force Scale level 6) when wind direction is northeast, east, or southeast.

3.2.2 The wave height in the anchorage under bunker operation is not allowed to be more than 1.5m.

3.2.3 The visibility of ship-to-ship berthing, ship-to-ship unberthing and ship-to-ship bunker transfer operation requests more than 1 nautical mile.

3.2.4 Barges identified by the department of Maritime Bureau with conditions of Night ship-to-ship berthing operations in Xiushan East Anchorage can conduct bonded oil bunker operation under Night ship-to-ship berthing in the anchorage after the file record is completed by the relevant department of Maritime Bureau.

3.3 Precautions.

3.3.1 12# Anchor position is a dedicated anchor position for bonded oil bunkering, and scheduling plan arrangement is in the charge of Bonded Fuel Dispatch Service Center of Zhoushan Port Comprehensive Bonded Zone.

3.3.2 In addition to 12# Anchor position, other anchorage positions application for international Vessel can be made online through VTSMP "Vessel Traffic Service Management Platform".

3.3.3 During bunkering operation, communication should be kept clear, and all vessels should keep on watch and listen day and night.

3.3.4 Bunker barge should strictly implement the procedure and requirements of the dangerous goods on board declaration and ship-to-ship bunker transfer operation reports.

4. Mazhi Anchorage

4.1 Area bounded by following Coordinates.

No.1 Anchorage

- A、29°55′30.0″N; 122°12′42.0″E;
- B、29°55′30.0″N; 122°16′30.0″E;
- C、29°54′00.0″N; 122°16′30.0″E;
- D、29°54′00.0″N; 122°12′42.0″E;

No.2 Anchorage

- A、29°53′20.0″N; 122°12′30.0″E;
- B、29°53′20.0″N; 122°13′30.0″E;
- C、29°52′30.0″N; 122°13′30.0″E;
- D、29°52′30.0″N; 122°12′12.0″E;

4.2 Mazhi Anchorage navigation and mooring requirements.

4.2.1 Bunker barge should be taken to get in touch with Vessel in advance when bunker barge is approaching to the Vessel to ensure the Vessel is ready to cast off and tighten mooring ropes.

4.2.2 Bunker barge should moor in the waters away from bunker anchor positions when idle without bunker operation.

4.3 Bunker operation restrictions.

4.3.1 Wind speed from Zhoushan Oceanic Meteorological Observatory forecast is not allowed to exceed 17.1m/s (Beaufort Wind Force Scale level 7), whist coastal wind speed from Zhoushan Meteorological Bureau forecast is not allowed to exceed

20.7m/s (Beaufort Wind Force Scale level 8).

4.3.2 The wave height in the anchorage under bunker operation is not allowed to be more than 1.5m.

4.3.3 The visibility of ship-to-ship berthing, ship-to-ship unberthing and ship-to-ship bunker transfer operation requests more than 1 nautical mile.

4.3.4 Night ship-to-ship berthing, night ship-to-ship unberthing and night ship-to-ship bunker transfer operation are available in this anchorage.

4.4 Precautions.

4.4.1 Y5 Anchor position is a dedicated anchor position for bonded oil bunkering, and scheduling plan arrangement is in the charge of Bonded Fuel Dispatch Service Center of Zhoushan Port Comprehensive Bonded Zone.

4.4.2 In addition to Y5 Anchor position, other anchorage positions application for international Vessel can be made online through VTSMP "Vessel Traffic Service Management Platform".

4.4.3 During bunkering operation, communication should be kept clear, and all vessels should keep on watch and listen day and night. Once completion of bunker operation, bunker barge should report to VTS of Zhoushan Maritime Bureau. immediately.

4.4.4 The anchor chain scope of Vessel should not be less than 5 shackles when the Vessel moors by single anchor at anchor position.

4.4.5 Ship owner, ship operator or ship agent should submit requests for Shallow Navigation Plan or Channel Navigation Plan one day in advance in VTSMP "Vessel Traffic Service Management Platform" of Zhejiang Maritime Bureau for Vessel with draught above 16 meters to enter or exit Mazhi Anchorage. It is requested to apply for

Shallow Navigation Plan for vessel with draught above 16m and Channel Navigation Plan for vessel with draught above 19m.

4.4.6 Bunker barge should strictly implement the procedure and requirements of the dangerous goods on board declaration and ship-to-ship bunker transfer operation reports.

5. Qushan Temporary Anchorage.

5.1 Anchor position coordinates.

1# 30°27′35.4″N; 122°28′4.4″E;

2# 30°27′36.4″N; 122°29′25.6″E;

5.2 Qushan Temporary Anchorage navigation and mooring requirements.

5.2.1 According to the principle against the current, Vessel enters the anchorage to approach to anchor positions and drop anchor against the current; when on departure, the principle is to use the northern section of the Sheyimen Channel and the previous Zhejiang North Central Channel. When in flood tidal current, Vessel should turn eastward from the Sheyimen Channel against the current to enter Qushan Temporary Anchorage (see Vessel C as shown in following Chart), and when in ebb tidal current, Vessel should turn westward from the previous Zhejiang North Central Channel against the current to enter Qushan Temporary Anchorage (see Vessel C as shown in following Chart), and when in ebb tidal current, Vessel should turn westward from the previous Zhejiang North Central Channel against the current to enter Qushan Temporary Anchorage (see Vessel A or Vessel E as shown in following Chart).

5.2.2 There are two main types of routes for Vessel to depart Qushan Temporary Anchorage. One is westward after weighing anchor via the Sheyimen Channel, and the other is eastward after weighing anchor via the previous Zhejiang North Central Channel.

5.2.2.1 As shown in following Chart, the Vessel B weighs anchor and proceed

eastbound in the anchorage for southward, she should proceed into the southward diversion of the previous Zhejiang North Central Channel at a small angle after departure of the anchorage (dashed arrow in front of the Vessel B starboard ); if the Vessel B is for northward, she should cross the southward diversion of the previous Zhejiang North Central Channel vertically after departure of the anchorage and then proceed into the northward diversion to navigate for northward (solid arrow in front of the Vessel B portside).

5.2.2.2 As shown in following Chart, the Vessel D weighs anchor and proceed westbound in the anchorage for northward, she should proceed into the northward diversion of the Sheyimen Channel at a small angle after departure of the anchorage. Since the southern section of the Sheyimen Channel is narrower with Shulanghu Terminal and Sheyimen Terminal on both sides, Vessel generally should not depart Qushan Temporary Anchorage in the southern section of the Sheyimen Channel.

5.2.3 Bunker barge is according to the customary route of small vessels.

5.3 Bunker operation restrictions.

5.3.1 Easterly wind speed from Zhoushan Oceanic Meteorological Observatory forecast is  $\leq 13.8$ m / s (Beaufort Wind Force Scale level 6), and other wind direction wind speed is  $\leq 17.1$ m / s (Beaufort Wind Force Scale level 7).

5.3.2 The wave height in the anchorage under bunker operations is  $\leq 1.5$ m.

5.3.3 The visibility of ship-to-ship berthing, ship-to-ship unberthing and ship-to-ship bunker transfer operation requests more than 1 nautical mile.

5.3.4 The tidal current is less than 3 knots.

5.4 Precautions.

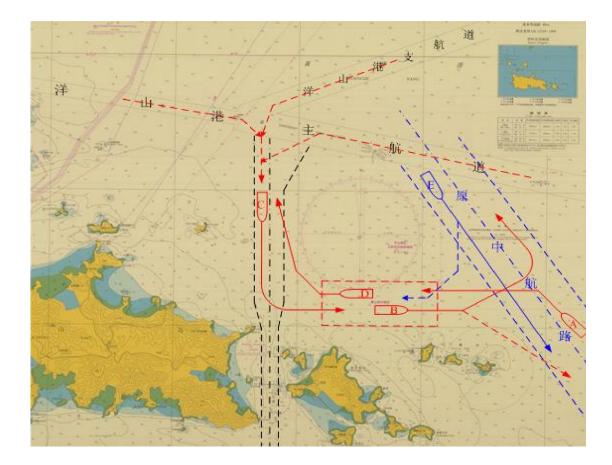
5.4.1 Anchorage positions application for international Vessel can be made online through VTSMP "Vessel Traffic Service Management Platform".

5.4.2 "Zhoushan Type" bunker barge and other bunker barge of above 3000 DWT in the whitelist can conduct bonded oil bunker operation in this anchorage.

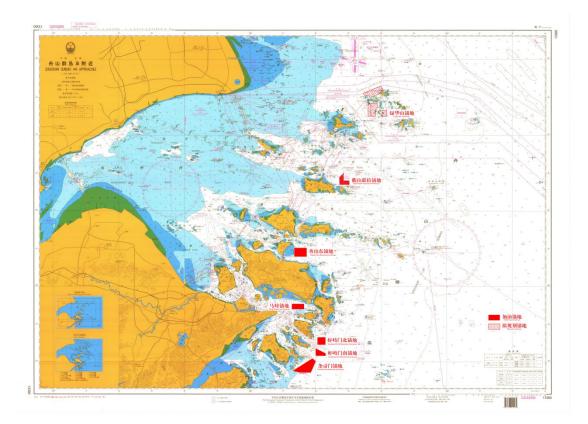
5.4.3 Vessel should report to the Vessel Traffic Control center of Zhoushan Marine Bureau through VHF system half an hour in advance for dropping anchor and weighting anchor, and keep watch on VHF16 and VHF12 during the whole process.

5.4.4 Bunker barge should strictly implement the procedure and requirements of the dangerous goods on board declaration and ship-to-ship bunker transfer operation reports.

5.4.5 Bunker barge should strictly implement the operation procedures to ensure the safety of mooring. During berthing, fenders should be arranged, appropriate mooring methods are used when mooring, and cables are checked and adjusted at any time.



6. Diagram of the main bunker supply anchorage in Zhoushan



7. Key meteorological reference websites:

Zhoushan Oceanic Meteorological Observatory https://www.zsghqx.com/ Zhoushan Sea Tide and Current Information Release http://hai.tsphp.com/index.php?wap Zhoushan Meteorological Bureau http://www.zs121.com.cn/wapnew/gztqyb.aspx

8. Related information

Zhoushan Marine Fuel Association official account in WeChat



Zhoushan Bunker information official account in WeChat



Official website: www.zsbunker.cn

Contact E-mail address: zszbddzx@163.com