HULL CLEANING

PORT OF FUJAIRAH

GUIDELINES & REQUIREMENTS

2023





Port of Fujairah Guidelines and Requirements

Table of Contents

S NO	DESCRIPTION	PAGE NO
1	Introduction	3
2	Purpose	4
3	Scope	4
4	Hull Cleaning Below the Waterline - Diving Operation	4
4.1	Requirements	4
4.2	Recommendations & Restrictions	4
4.3	Required Documents and Approval Process	4
5	Hull Cleaning Above the Waterline-Removing Marine growth and fouling	5
5.1	Requirements	5
5.2	Recommendations & Restrictions	6
5.3	Required Documents and Approval Process	7
6	Hull Cleaning by Removing Oil Stains	7
6.1	Requirements	7
6.2	Recommendations & Restrictions	9
6.3	Required Documents and Approval Process	9
7	Environmental Considerations and Waste Management	10
8	Forms	10

1. Introduction

By adopting the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004 (the BWM Convention), member states of the International Maritime Organization (IMO) made a clear commitment to minimizing the transfer of invasive aquatic species by shipping.

Studies have shown that biofouling can also be a significant vector for the transfer of invasive aquatic species. Biofouling on ships entering the waters of states may result in the establishment of invasive aquatic species which may pose threats to human, animal and plant life, economic and cultural activities and the aquatic environment.

While the International Convention on the Control of Harmful Anti-Fouling Systems on Ships, 2001 (the AFS Convention) addresses anti-fouling systems on ships, its focus is on the prevention of adverse impacts from the use of anti-fouling systems and the biocides they may contain, rather than preventing the transfer of invasive aquatic species.

The potential for invasive aquatic species transferred through biofouling to cause harm has been recognized by the IMO, the Convention on Biological Diversity (CBD), several UNEP Regional Seas Conventions (e.g., the Barcelona Convention for the Protection of the Mediterranean Sea Against Pollution), the Asia Pacific Economic Cooperation forum (APEC), and the Secretariat of the Pacific Region Environmental Program (SPREP).

All ships have some degree of biofouling, even those which may have been recently cleaned or had a new application of an anti-fouling coating system. Studies have shown that the biofouling process begins within the first few hours of a ship's immersion in water. The biofouling that may be found on a ship is influenced by a range of factors, such as:

1. design and construction, particularly the number, location and design of niche areas

2. the specific operating profile, including factors such as: operating speeds; ratio of time underway compared with time alongside, moored or at anchor; and where the ship is located when not in use (e.g., open anchorage or estuarine port)

3. places visited and trading routes; and

4. maintenance history, including the type, age and condition of any anti-fouling coating system; installation and operation of anti-fouling systems; and dry-docking/slipping and hull cleaning practices.

Hull cleaning is essential for removing biofouling and oil stains, which can cause environmental pollution and affect the ship's performance.

2. Purpose

The purpose of this document is to provide a comprehensive guide outlining the guidelines and requirements for conducting hull cleaning operations at the Port of Fujairah. This guide encompasses essential procedures, documentation, and regulations, promoting safety and environmentally-conscious practices during hull cleaning operations.

3. <u>Scope</u>

This document covers the following types of hull cleaning:

- a. Hull Cleaning Below the Waterline Diving Operation
- b. Hull Cleaning Above the Waterline- Removing Marine growth and fouling
- c. Hull Cleaning by Removing Oil Stains

4. Hull Cleaning Below the Waterline - Diving Operation

Underwater hull cleaning is essential for managing biofouling, maintaining a ship's performance, fuel efficiency, and environmental responsibility. By adhering to the Association of Diving Contractors International (ADCI) and the International Marine Contractors Association (IMCA) guidelines, diving operations for underwater hull cleaning at the Fujairah Offshore anchorage area are performed safely and effectively, minimizing environmental risks. The "**Port of Fujairah Diving Code of Practice for Commercial Diving**" outlines the in-water cleaning and maintenance procedures to be followed, ensuring compliance with international standards and environmental responsibility.

4.1 Requirements

Detailed information & requirements can be obtained from "**Port of Fujairah Diving Code of Practice for Commercial Diving**". This document provides comprehensive guidelines on how to conduct diving operations in accordance with ADCI and IMCA best industry practices.

4.2 Recommendations & Restrictions

For in-depth recommendations and limitations, consult the **"Port of Fujairah Diving Code of Practice for Commercial Diving."** This comprehensive guide outlines the rules and requirements for diving operations at the port, promoting safety and adherence to regulations for all participating parties.

4.3 Required Documents and Approval Process

To request approval for Diving operations, submit the required documents at least 48 hours before the intended start of the Diving operations activity to the HSE Department, Port of Fujairah. The necessary documents for diving activities at the Port of Fujairah can be found in the **"Port of Fujairah Diving Code of Practice for Commercial Diving."** These documents include Attachment 22 (a) - Diving Work Permit, Attachment 22 (b) - Diving Project Plan, and Attachment 22 (c) - Master Declaration.

5. Hull Cleaning Above the Waterline-Removing Marine growth and fouling

Hull cleaning above the waterline refers to removing marine growth and fouling from the exterior surface of a ship above the waterline.

5.1 Requirements

The following requirements apply to this type of hull cleaning:

I. **Permit to Work:** Authorization from the Port of Fujairah to perform hull cleaning above the waterline.

II. Method Statement:

The method statement should contain the following information:

(a) **Cleaning Method**: The chosen cleaning method should effectively remove marine growth and fouling while minimizing the release of contaminants into the surrounding waters. Common methods include manual scraping, high-pressure water jetting, and the use of specialized brushes or tools. The selected method should be appropriate for the type of fouling, the condition of the hull, and the applied antifouling coating.

(b) Equipment: The equipment used for hull cleaning should be well-maintained and appropriate for the specific cleaning method employed. This may include scrapers, brushes, water jets, and vacuum systems to collect debris and contaminants. The equipment should be operated according to the manufacturer's guidelines to ensure safety and effectiveness. High-pressure (HP) washing should not be used in a way that removes or peels paint from the hull rust. The maximum allowed High-pressure (HP) washing is 200 bar pressures.

(c) **Manpower**: A sufficient number of trained personnel should be assigned to the hull cleaning operation including Supervisor. The trained personnel should have the necessary skills and experience to carry out the cleaning process safely and efficiently. Adequate supervision should be provided to ensure that procedures are followed correctly.

(d) **Communication**: Clear and effective communication is essential throughout the hull cleaning process. The trained personnel should be briefed on the cleaning plan, safety procedures, and their individual responsibilities. Radio or other communication devices should be used to maintain contact between the crew of the ship and those working on the cleaning operation.

(e) Personal Protective Equipment (PPE): All personnel involved in the hull cleaning operation should wear appropriate PPE, such as safety helmets, gloves, safety boots, harnesses, and life jackets. PPE should be inspected regularly to ensure it is in good condition and offers adequate protection.

(f) Emergency Response Plans: A comprehensive emergency response plan should be in place to address any accidents or incidents that may occur during the hull cleaning process. This plan should include procedures for responding to fires, chemical spills, injuries, and other emergencies. All personnel should be familiar with the emergency response plan and trained in first aid and emergency response procedures.

- **III. Risk Assessment:** Identifying potential hazards and implementing suitable control measures.
- **IV. Master Declaration:** A signed declaration by the ship's master confirming adherence to guidelines and requirements.
- V. The Port of Fujairah allows registered diving companies to perform hull cleaning above the waterline. These approved diving companies have demonstrated compliance with the port's guidelines and requirements, ensuring that they follow safe, efficient, and environmentally responsible practices during the hull cleaning process. By utilizing an approved diving company, ship operators can ensure that the hull cleaning is conducted in accordance with the regulations set forth by the Port of Fujairah

5.2 Recommendations & Restrictions

- 1. Obtain permission from the HSE department 48 hrs prior to the intended activity.
- 2. Engage an approved Diving Company for marine growth and fouling removal, as they possess the necessary training and experience in handling such tasks in compliance with Port of Fujairah guidelines.
- 3. Assess the condition of the hull and anti-fouling coating before starting the cleaning process, as this may affect the choice of cleaning method and equipment.
- 4. Choose the appropriate cleaning method and equipment based on the type of fouling, hull condition, and anti-fouling coating.
- 5. Wear appropriate personal protective equipment (PPE), such as safety helmets, gloves, safety boots, harnesses, and life jackets, to minimize the risk of injury.
- 6. Establish clear communication between the cleaning crew and the ship's personnel, using radios or other communication devices.
- 7. Implement an emergency response plan to address potential incidents or accidents during the cleaning process, such as fires, chemical spills, or injuries.
- 8. Properly dispose of waste and debris collected during the cleaning process, in accordance with regulations and environmental guidelines.
- 9. Comply with all precautions and safety measures as per the risk assessment form and work permit.
- 10. Obtain permission from the control tower before and after conducting the cleaning operation.
- 11. The vessel's Master must ensure compliance with NTM 148, POF Safety rules, and regulations.
- 12. Do not use overly aggressive cleaning methods or equipment that could damage the hull or anti-fouling coating.
- 13. Do not use chemicals or cleaning agents that could negatively impact the marine environment.

- 14. High-pressure (HP) washing should not be used in a way that removes or peels paint from the hull.
- 15. Rust removal or chipping is not permitted during the cleaning process.
- 16. Do not conduct cleaning operations in adverse weather conditions.
- 17. Do not proceed with cleaning operations without first ensuring that all personnel are trained, briefed, and equipped with the necessary safety gear.
- 18. Hull cleaning is not allowed inside the Port or in the Service harbour.
- 19. Painting of the hull during the cleaning process is prohibited.
- 20. Oil stain cleaning by Diving Companies is prohibited.
- 21. The use of chemicals during the cleaning process is not allowed.
- 22. Do not dispose of waste and debris in an irresponsible manner or in violation of regulations and environmental guidelines.
- 23. OSR companies are not allowed to clean marine growth and fouling.
- 24. The Ship's crew will not involve in cleaning operations.

5.3 Required Documents and Approval Process

To request approval for hull cleaning operations, removing marine growth and fouling submit the following documents at least 48 hours before the intended start of the activities to the HSE Department, Port of Fujairah:

- 1. Attachment 27: Hull Cleaning
- 2. Attachment 28: Master Declaration-Hull Cleaning
- 3. Method Statement
- 4. Risk Assessment

Attachment 27: Hull Cleaning, Method Statement, Risk Assessment must be completed by company registered with the Port of Fujairah. Once completed, it should be sent to the Vessel's agent, who is responsible for submitting it, along with the required documents and the Master Declaration, to the HSE Department for approval.

6. Hull Cleaning by Removing Oil Stains

Removing oil stains from a ship's hull is essential for improving performance, minimizing environmental damage, maintaining aesthetic appeal, and ensuring compliance with regulations.

6.1 Requirements

The following requirements apply to this type of hull cleaning:

- **I. Permit to Work:** Authorization from the Port of Fujairah to perform hull cleaning by removing oil stains.
- II. Method Statement:

The method statement should contain the following information:

(a) **Cleaning Method:** The selected cleaning method should effectively remove oil stains without addressing marine growth or fouling, and minimize the release of

contaminants into the surrounding waters. Common methods include the use of oilabsorbent materials, ROPME-approved dispersants, and careful manual removal. The chosen method should be appropriate for the hull condition and the applied antifouling coating.

(b) Oil Boom Deployment: An oil boom should be deployed suitable configuration around the hull cleaning area to prevent the spread of oil and contaminants into the surrounding waters. The boom should be appropriately sized and securely fastened to maintain its position during the cleaning process.

(c) Equipment: The equipment used for oil stain removal should be well-maintained and appropriate for the specific cleaning method employed. This may include oil-absorbent materials, ROPME-approved dispersants, and manual cleaning tools. The equipment should be operated according to the manufacturer's guidelines to ensure safety and effectiveness.

(d) **Manpower:** A sufficient number of trained personnel should be assigned to the hull cleaning operation including Supervisor. The trained personnel should have the necessary skills and experience to carry out the cleaning process safely and efficiently. Adequate supervision should be provided to ensure that procedures are followed correctly.

(e) **Communication:** Clear and effective communication is essential throughout the hull cleaning process. The trained personnel should be briefed on the cleaning plan, safety procedures, and their individual responsibilities. Radio or other communication devices should be used to maintain contact between the crew of the ship and those working on the cleaning operation.

(f) Personal Protective Equipment (PPE): All personnel involved in the hull cleaning operation should wear appropriate PPE, such as safety helmets, gloves, safety boots, harnesses, and life jackets. PPE should be inspected regularly to ensure it is in good condition and offers adequate protection.

(g) Emergency Response Plans: A comprehensive emergency response plan should be in place to address any accidents or incidents that may occur during the hull cleaning process. This plan should include procedures for responding to oil boom failures, chemical spills, injuries, and other emergencies. All personnel should be familiar with the emergency response plan and trained in first aid and emergency response procedures.

- **III. Risk Assessment:** Identifying potential hazards and implementing suitable control measures.
- **IV. Master Declaration:** A signed declaration by the ship's master confirming adherence to guidelines and requirements NTM 148 V6.

V. The Port of Fujairah allows approved Oil Spill Response (OSR) companies to perform hull cleaning removal of Oil stains above the waterline. These approved OSR companies have demonstrated compliance with the port's guidelines and requirements, ensuring that they follow safe, efficient, and environmentally responsible practices during the hull cleaning process. By utilizing an approved OSR company, ship operators can ensure that the hull cleaning is conducted in accordance with the regulations set forth by the Port of Fujairah.

6.2 Recommendations & Restrictions

- 1. Obtain permission from the HSE department 48 hrs prior to the intended activity.
- 2. Engage an approved Oil Spill Response (OSR) company for oil stain removal, as they possess the necessary training and experience in handling such tasks in compliance with local regulations and guidelines.
- 3. Utilize an appropriate length of the boom from bow to stern to contain and prevent the spread of oil during the cleaning process.
- 4. Regularly inspect and adjust the boom to minimize the risk of failure.
- 5. Adhere to all precautions and safety measures as outlined in the risk assessment form and work permit.
- 6. Obtain permission from the control tower before and after conducting the cleaning operation.
- 7. The vessel's master must ensure compliance with NTM 148 and POF Safety rules and regulations.
- 8. Schedule cleaning operations during daylight hours only, from sunrise to sunset.
- 9. Do not use harmful chemicals or cleaning agents that could negatively impact the marine environment.
- 10. Do not conduct cleaning operations in adverse weather conditions.
- 11. Diving companies or unapproved personnel are not allowed to clean oil stains; only approved OSR companies can perform this task.
- 12. Oil stain removal inside the Port or in the Service Harbour is prohibited.
- 13. Night work for oil stain removal is not allowed due to safety and visibility concerns.
- 14. Do not dispose of waste and debris in an irresponsible manner or in violation of regulations and environmental guidelines.
- 15. The Ship's crew will not involve in cleaning operations.

6.3 Required Documents and Approval Process

To request approval for hull cleaning operations involving Oil stains removal submit the following documents at least 48 hours before the intended start of the activities to the HSE Department, Port of Fujairah:

- 1. Attachment 27: Hull Cleaning
- 2. Attachment 28: Master Declaration-Hull Cleaning
- 3. Method Statement
- 4. Risk Assessment

Attachment 27: Hull Cleaning, Method Statement, Risk Assessment must be completed by company registered with the Port of Fujairah. Once completed, it should be sent to the Vessel's agent, who is responsible for submitting it, along with the required documents and the Master Declaration, to the HSE Department for approval.

7. Environmental Considerations and Waste Management

All hull cleaning operations must adhere to environmental best practices and regulations to minimize harm to marine life and ecosystems. This includes proper waste management and disposal plans, as outlined in the Method Statement for each operation. Companies must ensure that all waste generated during hull cleaning operations is appropriately collected, stored, treated, and disposed of in accordance with local and international guidelines. Ship cleaning methods must be adopted to ensure that viable biofouling organisms or chemical and physical pollutants are not released into the local aquatic environment. Companies are responsible for collecting as much waste as possible and practicable, ensuring a thorough and environmentally responsible cleaning process.

8. <u>Forms</u>

- 1. Attachment 27: Hull Cleaning
- 2. Attachment 28: Master Declaration-Hull Cleaning

Port of Fujairah		PORT OF FUJAIRAH							
ميناء الفحيرة	Document Title:	HULL CLEANING	Revision No.:	1					
Port of Fujairah United Arab Emirates	Document No.:	ATTACHEMENT 28-NTM 148 V6	Revision Date:	01.05.2023					

The Hull Cleaning Permit must be completed by company registered with the Port of Fujairah. Once completed, it should be sent to the Vessel's agent, who is responsible for submitting it, along with the required documents and the Master Declaration, to the HSE Department for approval.

HULL CLEANING (Please tick appropriately)

1 Hull Cleaning above the Waterline-Removing marine growth and fouling

2 Hull Cleaning by Removing Oil Stains

Name of Ship			Type of Ship		
IMO No			Flag		
Duration of	From				То
Cleaning (Day Light only)	Date			Date	
(buy Light only)	Hours			Hours	
Registered Company Name				Contact	
Registered Agent				Contact	

Attached	1. Risk Assessment	3. Master Declaration	
Documents	2. Method Statement		

Job Location	
Description of Work	
Equipment to be used	

Checklist	YES	NO	NA	Checklist		NO	NA
Obtain permission from the HSE department 48 hours prior to the intended activity.				Do not use overly aggressive cleaning methods or equipment that could damage the hull or anti- fouling coating.			
Ensure personnel wear appropriate personal protective equipment (PPE) during the cleaning process.				Do not use chemicals or cleaning agents that could negatively impact the marine environment.			
Assess the condition of the hull and anti-fouling coating before starting the cleaning process.				Do not use high-pressure washing in a way that removes or peels paint from the hull.			
Choose the appropriate cleaning method and equipment based on the type of fouling, hull condition, and anti-fouling coating.				Do not perform rust removal or chipping during the cleaning process.			
Establish clear communication between the cleaning Personnel and the ship's crew.				Do not conduct cleaning operations in adverse weather conditions			
Implement an emergency response plan to address potential incidents during the cleaning process.				Do not perform hull cleaning inside the Port or in the Service harbour.			
Properly dispose of waste and debris collected during the cleaning process according to regulations and environmental guidelines.				Do not dispose of waste and debris irresponsibly or in violation of regulations and environmental guidelines.			
Comply with all precautions and safety measures as per the risk assessment form and work permit.				Schedule cleaning operations during daylight hours only, from sunrise to sunset.			
Obtain permission from the control tower before and after conducting the cleaning operation.				The Ship's crew will not involve in cleaning operations.			
Ensure the vessel's Master complies with NTM 148 and POF Safety rules and regulations.							

Por	t of Fujairah
	ميناء الفحيرة
	Port of Fujairah
Unite	ed Arab Emirates

Document Title:

Document No.:

PORT OF FUJAIRAH

ATTACHEMENT 28-NTM 148 V6

HULL CLEANING

Revision No.:

Revision Date:

01.05.2023

1

Checklist		NO	NA	Checklist		NO	NA
Obtain permission from the HSE department 48 hours prior to the intended activity.				Do not use chemicals or cleaning agents that could negatively impact the marine environment.			
Ensure personnel wear appropriate personal protective equipment (PPE) during the cleaning process.				Do not conduct cleaning operations in adverse weather conditions.			
Utilize an appropriate length of the boom from bow to stern to contain and prevent the spread of oil during the cleaning process.				Oil stain removal inside the Port or in the Service Harbour is prohibited			
Regularly inspect and adjust the boom to minimize the risk of failure.				Do not dispose of waste and debris in an irresponsible manner or in violation of regulations and environmental guidelines.			
Establish clear communication between the cleaning personnel and the ship's Crew.				Schedule cleaning operations during daylight hours only, from sunrise to sunset.			
Implement an emergency response plan to address potential incidents during the cleaning process.				Do not perform rust removal or chipping during the cleaning process.			
Properly dispose of waste and debris collected during the cleaning process according to regulations and environmental guidelines.				Do not use high-pressure washing in a way that removes or peels paint from the hull.			
Comply with all precautions and safety measures as per the risk assessment form and work permit.				The Ship's crew will not involve in cleaning operations.			
Obtain permission from the control tower before and after conducting the cleaning operation.							
Ensure the vessel's Master complies with NTM 148 and POF Safety rules and regulations.							

Authorization to Work & Signature

I accept this permit and agree to adhere to the conditions specified within it, as well as the relevant procedures. I accept my responsibility as the individual directly overseeing the designated task. I have reviewed the attached Risk Assessments and Method Statement and confirm that I have observed the necessary risk controls in place.

Name of Supervisor		Signature with Stamp		Date		
As the permit issuer, I authorize the execution of the Hull Cleaning, provided that all conditions and precautions outlined in the Risk Assessment & method statement are strictly followed. The completion of this Permit is contingent upon adherence to the specified guidelines.						

Name of	Signatur	e	
Permit	with	Da	Date
Issuer	Stamp		

Completion, Suspension or Cancellation of Work							
All work associated with this Hull Cleaning Work Permit has been:							
Upon completion of the hull cleaning work, the work area and surrounding areas have been thoroughly inspected to ensure that all potential hazards have been addressed and the environment is safe.							
Equipment has I		□ YES	□ NO				
Name of Supervisor	Signature with Stamp	Date		Time			

Once the cleaning operation is **completed**, the registered diving company and the Oil Spill Response (OSR) company associated with the respective cleaning operation should sent photographs of the Ship's hull. These photos must be demonstrating the condition of the hull before and after the cleaning process.

Port of Fujairah		PORT OF FUJAIRAH		
ميناء الفجيرة	Document Title:	MASTER DECLARATION- HULL CLEANING	Revision No.:	1
Port of Fujairah United Arab Emirates	Document No.:	ATTACHMENT 29-NTM 148 V6	Revision Date:	01.05.2023

MASTER DECLARATION- HULL CLEANING (Please tick appropriately)

1	Hull Cleaning above the Waterline-Removing Marine growth and fouling	
2	Hull Cleaning by Removing Oil Stains	

General Details					
Name of Ship		Type of Ship			
IMO No		Flag			
Contact No		E-Mail of Ship			
Registered Company Name		Contact No.			
Registered Agent Name		Contact No.			

Hull (Cleaning above the Waterline-Removing Marine growth and fouling		
SNO	Item	YES	NO
1	An approved Diving Company will be engaged for marine growth and fouling removal, as they possess the necessary training and experience in handling such tasks in compliance with Port of Fujairah guidelines.		
2	All personnel will wear appropriate personal protective equipment (PPE) to minimize the risk of injury.		
3	Clear communication between the Ship crew and the cleaning personnel will be established.		
4	Do not conduct cleaning operations in adverse weather conditions		
5	During the cleaning process, the disposal of waste and debris will be carried out in compliance with regulatory and environmental standards to the greatest extent feasible and practical.		
6	All precautions and safety measures as per the risk assessment form and work permit will be complied with.		
7	Permission from the control tower will be obtained before and after conducting the cleaning operation.		
8	Compliance with NTM 148, POF Safety rules, and regulations will be ensured.		
9	Cleaning operations will be scheduled during daylight hours only, from sunrise to sunset.		
10	The Ship's crew will not involve in cleaning operations.		
Hull (Cleaning by Removing Oil Stains		
SNO	Item	YES	NO
1	An approved Oil Spill Response (OSR) company will be engaged for oil stain removal, as they possess the necessary training and experience in handling such tasks in compliance with local regulations and guidelines.		
2	All personnel will wear appropriate personal protective equipment (PPE) to minimize the risk of injury.		
3	An appropriate length of the boom from bow to stern will be utilized to contain and prevent the spread of oil during the cleaning process.		
4	Clear communication between the Ship crew and the cleaning personnel will be established.		
5	All precautions and safety measures as outlined in the risk assessment form and work permit will be adhered to.		
6	Permission from the control tower will be obtained before and after conducting the cleaning operation.		
7	Compliance with NTM 148 and POF Safety rules and regulations will be ensured.		
8	Cleaning operations will be scheduled during daylight hours only, from sunrise to sunset.		
9	The Ship's crew will not involve in cleaning operations.		
10	During the cleaning process, the disposal of waste and debris will be carried out in compliance with regulatory and environmental standards to the greatest extent feasible and practical.		

ATTACH DOCUMENT Master Statement verifying potential source of oil stains on the hull, in the event that hull cleaning for oil stain removal is requested.

I, the undersigned Master of the Vessel, hereby declare that the above safety precautions will be strictly adhered to during Hull Cleaning and that the Port of Fujairah rules and regulations will be complied with.

	Signature		
Name of Master:	with	Date:	
	Stamp:		