

## Open Loop EGCS

Countries and Ports

Updated on 16 March 2023

Country	MARPOL Annex VI Ratified?	Open Loop Wash Water Discharge	Exceptions	Official Public Announcement	Other Announcement or Information	Additional Information
Albania	No	Restricted	Port of Saranda (allowed)		<u>Federal Level</u> General Maritime Directorate of Albania E-mail dated 17/04/2021 (there is no legislation in place yet)	<u>Federal Level</u> As the country is located in Adriatic Sea and the circulation of the water is slower than other open ports in Mediterranean Sea, the Government of Albania does not allow the discharge of the washwater generated by the open loop EGCS in the country territorial waters and ports limits.
Algeria	No					
Angola	No					
Antigua & Barbuda	Yes					
Argentina	Yes	Allowed		<u>Federal Level</u> Prefectura Naval, Dirección de Protección Ambiental Resolution DISFC-2020-22-APN-DPAM#PNA dated 24/09/2020	<u>Federal Level</u> División Mercancías y Residuos Peligrosos Dirección de Protección Ambiental Prefectura Naval Argentina E-mail dated 28/09/2022	<u>Federal Level</u> This resolution took effect from 03/10/2020 and there is the risk that this suspension is provisional as the restrictions have not been permanently overturned (Resolution 15/2020 suspended).  <u>Federal Level (additional consultation)</u> At present, the application of the Provision that limits water discharges from Open Loop Scrubbers in national, maritime and fluvial jurisdictions is suspended, confirming the information that was given in October 2020.
Australia	Yes	Allowed	- Port of Hastings	<u>Federal Level</u> Marine Notice 12/2022 (October 2022) Requirements for the use of exhaust gas cleaning systems in Australian waters  <u>Sydney Harbour Cruise Ship Emissions</u> Published on AMSA website	<u>Port of Hastings</u> Per Harbor Master's current interpretation of EGCS washwater in the context of the Harbor Master Directions.	<u>Federal Level</u> The use of an EGCS is permitted in Australian waters as an option to comply with the low sulphur fuel requirements of MARPOL Annex VI, as set out in the Protection of the Sea (Prevention of Pollution from Ships) Act 1983, section 26FEGA, provided it is approved by the vessel's flag State Administration, or a recognised organisation appointed by the flag State. The EGCS must also be operated in accordance with International Maritime Organization (IMO) requirements, including the 2021 Guidelines for Exhaust Gas Cleaning Systems (resolution MEPC.340(77)).  <u>Port of Sydney</u> Cruise ships capable of accommodating more than 100 passengers in Sydney Harbour are required to use either low sulphur (maximum 0.10% m/m) fuel or an alternative measure that achieves an equivalent outcome i.e. EGCS.  <u>Port of Hastings</u> Discharges from EGCS into Westernport waters are not permitted. This is a more precautionary restriction on EGCS use based on an overly conservative interpretation of the port regulations by the harbor master.  <u>Port of Victoria and South Australian Area</u> Written approval to the use of the EGCS in the Port of Victoria and South Australian area (e-mails in the repository).
Azerbaijan	Yes					
Bahamas	Yes					

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Bahrain	No	Conditional		<a href="#">Federal Level</a> Ministry of Transportation and Telecommunications Marine Notice: PMA/03/2019 effective from 31/12/2019		<a href="#">Federal Level</a> Vessels must obtain a permit from the Marine Safety & Environment Protection Directorate before discharging washwater anywhere in Bahrain waters.
Bangladesh	Yes	Allowed			Verbal approval received.	
Barbados	Yes					
Belgium	Yes	Restricted		<a href="#">Federal Level</a> Law of 26 March 1971 on the protection of surface waters against pollution (transposition of the Water Framework Directive in Flanders <a href="http://www.ejustice.just.fgov.be/cgi_loi/change_lg.pl?language=fr&amp;la=F&amp;cn=1971032632&amp;table_name=loi">http://www.ejustice.just.fgov.be/cgi_loi/change_lg.pl?language=fr&amp;la=F&amp;cn=1971032632&amp;table_name=loi</a>		<a href="#">Federal Level</a> The discharge of scrubber wash water is permitted in coastal and open seas from the baseline (where the baseline is defined as the mean low-low watermark), provided that the discharges comply with IMO Guidelines. The discharge of scrubber wash water is not permitted in Belgian ports or inland waters and this ban on discharge has nothing to EGCS systems but is an old law that apply to all discharges.
Belize	Yes	Restricted		<a href="#">Federal Level</a> Belize Port Authority Marine Circular 01/2018 - BPA/MS/23-1/2018(98) dated 12/12/2018		<a href="#">Federal Level</a> Discharge of Exhaust Gas Cleaning Wash Water prohibited in territorial waters and port areas.
Benin	Yes					
Bermuda		Restricted		<a href="#">Federal Level</a> Environmental Policy for Ships		<a href="#">Federal Level</a> Article 3: The maximum allowed sulphur content in fuel for combustion purposes on a ship is 0.5%. Ships equipped with exhaust gas cleaning systems (EGCS) shall seek the prior approval of the Environmental Authority before its use in Bermuda's territorial waters. Washwater and residue from the EGCS shall be not disposed of in Bermuda or discharged into Bermuda's waters but shall be stored on board the ship until outside of Bermuda's waters.
Bosnia & Herzegovina	No					
Brazil	Yes	Allowed	Vale Ports CSN TECAR Terminal (Itaguaí)	<a href="#">Federal Level</a> Diretoria de Portos e Costas (DPC) Carta Circular 7/2019 dated 22/12/2019	<a href="#">CSN TECAR Terminal (Itaguaí)</a> Statement from 23/06/2022	<a href="#">Federal Level</a> As a result of CSA engagements, the Brazilian Environmental Authority (IBAMA) sent a formal letter confirming that the Directorate of Ports and Coasts (DPC) has the authority to regulate the country's jurisdictional waters.  <a href="#">Vale Ports</a> Vale recommends that vessels should be changed over to compliant fuel before entering contiguous zone or coastal waters (24 nautical miles from coastline).  <a href="#">CSN TECAR Terminal (Itaguaí)</a> Recommendations and determinations: - to use only Low Sulphur Fuel Oil (LSFO) and to not dispose any Scrubber's Wash water into the ocean once entering into [contiguous] zones or coastal waters (24 nautical miles from coast line), and - to use only L SFO and to not dispose any Scrubber's Wash water into the ocean while navigating or operating in side berths 101,102 and 202.

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British Virgin Islands	Yes	Restricted		<u>Federal Level</u> Government of the Virgin Islands Virgin Islands Shipping Registry Marine Circular 06/2021		<u>Federal Level</u> Discharging of wash water from open loop mode EGC systems (Scrubber) is prohibited when ships are within BVI waters. This prohibits the discharge of wash water generated by open loop scrubbers in all jurisdictional waters including, territorial sea, contiguous zone and exclusive economic zone of BVI.
Brunei Darussalam	No					
Bulgaria	Yes					
Cabo Verde	No					
Cambodia	No					
Cameroon	No					
Canada	Yes	Allowed	Port of St. John Port of Vancouver	<u>Port of Vancouver</u> Port Information Guide Updated Consideration Report	<u>Port of St. John</u> E-mail from Melissa Williams dated 13/07/2020 Manager, Marine Operations & Harbour Master	<u>Port of Vancouver</u> The discharge of wash water from exhaust gas cleaning systems (EGCS) from all fuel combustion running machinery (excluding main engines) into the environment is not permitted while a vessel is at anchorage or at berth within the Port of Vancouver. This applies to the wash water from open-loop, closed-loop and hybrid EGCS. It does not apply to inert-gas scrubbers required by tankers for cargo operations and safety reasons.  <u>Port of S. John</u> Only closed loop authorized.
Chile	Yes	Allowed		<u>Federal Level</u> DIRECTEMAR - Armada de Chile D.S Y O.M. Ordinario No. 12.600/666 dated 06/09/2018 Ref: Consultation OIRS No. 12.529 from 23/08/2018		<u>Federal Level</u> According to the item 2 of the referred document, there are no restriction to the use of the open loop scrubbers by the vessels by the Maritime Authority as long as they follow the Resolution MEPC. 184(59) from 2009.
China	Yes	Restricted	Port of Hong Kong (conditional)	<u>Emission Control Areas (ECAs)</u> Notice on Regulating the Supervision and Administration of ECAs HWF [2018] No.555 dated 29/12/2018 Additional document: Circular PNI 1901 dated 15/01/2019  <u>Hong Kong</u> Air Pollution Control (Fuel for Vessels) Regulation L.N. 135 of 2018 (B4159)		<u>Emission Control Areas (ECAs)</u> It is prohibited to discharge into Inland River ECAs, waters of ports in Coastal ECAs and Bohai sea waters the washing water generated from open exhaust gas cleaning system.  <u>Hong Kong</u> Vessels must issue an application to the Hong Kong authorities requesting for an exemption from using compliant fuel. The exemption application must be made at least 14 days prior to a ship's first visit to Hong Kong after 1 January 2019.
Colombia	Yes	Restricted		<u>Federal Level</u> Dirección General Marítima, Autoridad Marítima Colombiana Circular CR-20200135 dated 29/07/2020		<u>Federal Level</u> The Colombian Maritime Authority prohibits the discharge of the washwater from the open loop EGCS within internal waters, territorial sea and the contiguous Colombian zone and provides that ships carrying hybrid EGCS, while they are within internal waters, territorial sea and contiguous Colombian zone, must change to closed loop.
Comoros	No					
Congo	Yes					
Cook Islands	Yes					

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Costa Rica	No					
Cote d'Ivoire	No					
Croatia	Yes	Restricted		<p><u>Port of Split</u> Notice from the Ministry of the Sea, Transport and Infrastructure Notice from 27/10/2017</p> <p><u>Directive of Quality of Liquid Oil Fuels</u> Dated 03/12/2022</p>		<p><u>Port of Split</u> Only closed loop allowed.</p> <p><u>Directive of Quality of Liquid Oil Fuels</u> Article 13, paragraph 1,8: The quantity of sulphur emission from fuel for all vessels sailing in Croatian national waters must not exceed 0,50 % (m/m), the SECA areas are excluded from this restriction and for these the limits apply as for vessels in ports. Article 13, paragraph 3,4,5: The quantity of sulphur emission from fuel for all vessels in Croatian ports and anchorage must not exceed 0,10 % (m/m). Vessels must switch to fuel consumption to the fuel type which is adherent to the previously mentioned limit within 90 minutes of its declared ATA (actual time of arrival) and must be properly mentioned in the ships logbook. 3) Article 18, paragraphs 1-4,6: For all vessels using systems for reducing emissions, same must be reduced to the limits as declared in the article 13. No open-loop systems are to be used which can cause pollution to the air, water or shoreland.</p>
Cuba	No					
Cyprus	Yes	Conditional		<p><u>Federal Level</u> Cyprus Port Authority CPA Regulations of CA 373/2016 Part II</p>		<p><u>Federal Level</u> Ships requiring to use EGCS at Cyprus' ports or anchorage area must submit a written request for assessment and approval by the CPA at least 48 hours prior to the arrival of the ship. The written request shall provide the following detailed information: - the location that EGCS will be used (port, anchor); and - the type of EGCS.</p>
Denmark	Yes	Allowed			<p><u>Copenhagen Malmo Port</u> Communication from Environmental Manager of Copenhagen Malmo Port (Pia Mai) dated 29/03/2019 which was cancelled because CPM has no authority to apply such restrictions. E-mail from Lene Estergaard from 29/01/2020.</p>	
Djibouti	No					
Dominica	No					
Dominican Republic	No					
DPR Korea	No					
DR Congo	No					

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Egypt	No	Conditional	Suez Canal (open loop scrubbers is allowed but the discharge of the washwater is not)	<u>Suez Canal Authority</u> Circular 8/2019 Clarification of Circular 8/2019 dated 12/01/2020	<u>Egyptian Authority for Maritime Safety</u> E-mail dated 26/04/2021	<u>Egyptian Authority for Maritime Safety</u> The usage of EGCS in territorial waters requires approval of Egyptian Environmental Affairs Agency (EEAA) and Ports Authorities' approval to assess environmental impacts on marine environment in territorial waters.  <u>Suez Canal Authority</u> Suez Canal Authority puts no conditions or restrictions on fuel oil or open-loop Exhaust Gas Cleaning Systems until ratification of MARPOL Annex VI by Arab Republic of Egypt.  Clarification: "Stop open loop cleaning system outboard discharge during transition of Suez Canal".
El Salvador	No					
Equatorial Guinea	No					
Eritrea	No					
Estonia	Yes	Allowed		<u>Federal Level</u> Maritime Administration Circular No. 4 (No. 5-1-7/4) dated 21/10/2019	<u>Federal Level</u> E-mail from Estonian Transport Administration dated 16/02/2021	<u>Federal Level</u> Using open-loop exhaust gas cleaning systems in Estonian ports are not prohibited, but their washwater must comply with the requirements of the IMO resolution MEPC.184(59).
Fiji	No					
Finland	Yes	Allowed	Port of Porvoo (EGCS not allowed in harbour area)		<u>Federal level</u> Ministry of Transport and Communication E-mail from Laura Sarlin dated 05/03/2021	<u>Federal Level</u> Under Finnish legislation, the discharge of wash waters from open-loop scrubbers is allowed in Finnish ports and territorial waters. However, some ports (at least one) have restricted the discharge in the port area under their own competence.
France	Yes	Allowed	Not allowed: - Cannes - Marseille - Le Havre - Cherbourg - Reunion - Dunkirk	<u>Federal Level</u> Code of Transport Decree No. 84-810 modified Change of Division 213 during 07/07/2021 session  <u>Cannes</u> Cannes Bay Sustainability Charter  <u>Marseille, Le Havre, Cherbourg</u> French Code of Transports (Code de Transports), article R5333-28	<u>Reunion</u> Communication from Harbor Master (no official document yet)  <u>Dunkirk</u> Notification received by DFDS on 04/05/2021	<u>Federal Level</u> Restriction to the open loop scrubbers implemented on 01/01/2022 with 4,000 Euros fine for the non-compliant ships.  <u>Cannes</u> Restriction applied to the cruise ships only.  <u>Marseille, Le Havre, Cherbourg</u> <a href="https://codes.droit.org/PDF/Code%20des%20transports.pdf">https://codes.droit.org/PDF/Code%20des%20transports.pdf</a>
Gabon	Yes					
Gambia	No					

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Georgia	No	Allowed		<u>Federal Level</u> Harbour Rules	<u>Federal Level</u> Ministry of Economy and Sustainable Development of Georgia E-mail from the First Deputy Director dated 16/04/2021	<u>Federal Level</u> The article 75 of "Harbour Rules" (which is main legal act regulating the safety and environmental standards in all Georgian ports) doesn't allow to discharge overboard any oily mixtures, sewage, garbage, chemical substances or dirty waters within the ports limits.  Territorial waters: national legislation doesn't exactly mention the washwater from EGCS, however state environmental services have imposed heavy fines on discharge of any kind of solid or liquid which may cause pollution/discoloration the sea water. <u>That's why they suggest to avoid discharge of washwaters overboard.</u>  This case is similar to Mexico as the washwater from the open loop scrubbers does not fall into the category of pollutant and it is not correct to apply fines based on a recommendation where the legislation is not 100% clear.
Germany	Yes	Conditional	- Inland waterways (restricted) - Canals (restricted) - Port of Kiel (restricted) - Port of Hamburg (restricted) - Port of Rostock (restricted)	<u>Federal Level</u> Discharge conditions for washing water from exhaust gas cleaning systems (scrubbers) in German waters (Federal Maritime and Hydrographic Agency) dated 24/07/2018 CDNI signed in Strasbourg on 09/09/1996 (effective from 01/11/2009)  <u>Ports of Hamburg and Rostock</u> Infosheet Hamburg Port Authority dated 20/08/2019	<u>Port of Kiel</u> E-mail from the Harbour Master dated 02/07/2021	<u>Federal Level</u> Restrictions apply to all inland waterways intended for general traffic except for the German part of Lake Constance and the stretch of the Rhine upstream of Rheinfelden.  The operator of the scrubber must present evidence that the washwater is in line with the IMO Guidelines for exhaust gas cleaning systems (MEPC Res 184/59), and in case caustic soda is used that the PH value is not over 0,8, a scrubber can be used in the EEZ.  <u>Port of Kiel</u> Use of open loop scrubber in the port of Kiel is allowed while ship is in motion and forbidden while ship is alongside berth. While moving (maneuvering): allowed / Safely moored: forbidden.  <u>Ports of Hamburg and Rostock</u> The discharge of washwater from a scrubber into the river Elbe and in the Ports of Hamburg and Rostock is strictly prohibited.
Ghana	Yes	Restricted		<u>Federal Level</u> Ghana Maritime Authority Official document dated 18/05/2020	<u>Federal Level</u> Ghana Maritime Authority E-mail dated 19/04/2021	<u>Federal Level</u> The washwater generated by the open loop EGCS is NOT allowed in Ghana port limits and territorial waters.
Gibraltar	Yes	Restricted			<u>Federal Level</u> Gibraltar Port Authority E-mail dated 28/11/2015	<u>Federal Level</u> The Ministry of Environment and informed that for the time being the use of open loop scrubber systems is prohibited in British Gibraltar Territorial Waters. The Department of the Environment is applying the precautionary principle to discharges into the aquatic environment.

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Greece	Yes	Allowed			<u>Federal Level</u> Marine Environment Protection Directorate Ministry of Maritime Affairs & Insular Policy E-mail signed by Captain HCG, MARAGOS Georgios Ref. No: 2263.1-7/26287/2021 dated 12/04/2021	<u>Federal Level</u> "Wash water resulting from exhaust gas cleaning systems which make use of chemicals, additives, preparations and relevant chemical created in situ", referred to in point 10.1.6.1 of Resolution MEPC.184(59), shall not be discharged into the sea, including enclosed ports, harbours and estuaries, unless it is demonstrated by the ship operator that such wash water discharge has no significant negative impacts on and do not pose risks to human health and the environment. If the chemical used is caustic soda it is sufficient that the washwater meets the criteria set out in Resolution MEPC.184(59) and its pH does not exceed 8,0."
Grenada	No					
Guatemala	Yes					
Guinea	No					
Guinea-Bissau	No					
Guyana	Yes					
Haiti	No					
Honduras	Yes	Allowed			<u>Federal Level</u> Dirección General de la Marina Mercante E-mail dated 24/03/2021	<u>Federal Level</u> The discharge of washwaters produced by this system is not prohibited, as long as the ship complies with the Resolution MEPC.259(68), adopted by the correspondent IMO Committee.
Iceland	Yes	Allowed			<u>Federal Level</u> Environment Agency of Iceland E-mail dated 22/03/2021  <a href="https://ust.is/search/?query=regluger%C3%B0+nr.+124%2F2015">https://ust.is/search/?query=regluger%C3%B0+nr.+124%2F2015</a>	<u>Federal Level</u> According to Annex II in Icelandic regulation No. 124/2015, the washwater discharge criteria of MEPC.184(59) applies. Washwater from exhaust gas cleaning systems using "relevant" chemicals shall not be discharged into the sea, incl. in enclosed harbors and estuaries, unless it is demonstrated by the ship operator that such washwater discharge has no significant negative impacts on and does not pose risks to human health and the environment. If the chemical used is sodium hydroxide, it is sufficient that the washwater meets the criteria set out in Resolution MEPC.184(59) and that the pH does not exceed 8,0.
India	Yes	Allowed				<u>Adani Ports</u> The restriction in Adani Ports was revoked by the Circular APSEZL/Marine/18/2020 dated 05/11/2020.
Indonesia	Yes	Allowed			Verbal approval received.	
Iran	Yes					
Iraq	Yes					

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Ireland	Yes	Allowed	- Port of Dublin - Port of Waterford - Port of Cork - Port of Bantry - Shannon Foynes Port	<u>Port of Dublin</u> Notice to Mariners No. 26/2021 dated 01/01/2021  <u>Port of Waterford</u> Marine Notice 01/2019 dated 02/01/2019  <u>Ports of Cork and Bantry</u> Notice to Mariners 15/2018 dated 12/01/2018  <u>Shannon Foynes Port</u> Port Information Guide dated March 2021		<u>Shannon Foynes Port</u> Where EGCS are operational on vessels, those of the closed loop type only are permitted within the portlimits of the Shannon Estuary.
Israel	No	Allowed	Israeli Ports	<u>Ports Limits</u> State of Israel Administration of Shippings and Ports MP 27 dated 11/01/2023	<u>Federal Level</u> Ministry of Transport and Road Safety Administration of Shipping & Ports E-mail dated 30/03/2021	<u>Federal Level</u> Open loop scrubbers are allowed in territorial waters and ports limits.  <u>Ports Limits</u> The new regulations prohibits the use of fuel oil with a Sulphur content of more than 0.1 0 per cent when mooring alongside port or in anchorage ports limit area —unless an EGCS is fitted. Carrying non-compliant fuel on board as from 23 of February 2023 on ships which are not fitted with EGCS, will be subject to port State control actions.
Italy	Yes	Allowed		<u>Federal level</u> Ministry of Infrastructure and Transport Coast Guard Headquarters Safety of Navigation Department Circular "Navigation Safety" No.132/2017/Rev.1, as amended 19/12/2019		
Jamaica	Yes	Allowed			<u>Federal Level</u> Harbour Master of Jamaica Port Authority Captain Hopeton DeLisser E-mail dated 31/12/2019	<u>Federal Level</u> There is no objection to vessels calling at our ports using Exhaust Gas Cleaning Systems ( open loop scrubbers) that are approved by Class. Most important is that an accurate log of EGCS use is maintained and is available for inspection by our PSC officers from the Maritime Authority of Jamaica.
Japan	Yes	Allowed		<u>Federal Level</u> Ministry of Land, Infrastructure, Transport and Tourism (MLIT) Wash water discharge from open-looped Sox scrubber system Document dated 19/02/2019		<u>Federal Level</u> 1. Scrubbers enable to mitigate potential risks to human health by reducing harmful substances; not only SOx and PM, but also PAHs and other materials that would otherwise be emitted into the atmospheric air. 2. Japanese government assessed the potential risks to marine environment by discharged water from scrubber. 3. Japan concluded that the discharge water with chemical substances such as SOx, PAHs and heavy metals can NOT cause unacceptable effects either on the marine organisms or on the seawater quality around Japan. 4. Therefore, Japan is of the position that there would NOT be a scientific justification to prohibit the use of openlooped scrubber, as long as the IMO's discharge criteria were met.
Jordan	Yes	Allowed				



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Kenya	Yes	Allowed	Port Limits	<u>Federal Level</u> Republic of Kenya Kenya's National Guidelines for Implementation of IMO 2020 December 2019		<u>Federal Level</u> 7.1. The discharge of wash-water from open-loop scrubbers is prohibited in the Kenyan Ports limits. This is to maintain the standard of Kenya marine water quality. 7.2 While in the port of Mombasa, ships fitted with hybrid type of scrubbers shall switch to the closed-loop mode of operation. Ships fitted with open-loop scrubbers shall switch over to compliant fuel oil.
Kiribati	Yes					
Kuwait	Yes					
Latvia	Yes	Allowed			<u>Federal Level</u> Maritime Administration of Latvia E-mail dated 17/02/2021  <u>Port of Riga</u> Harbour Master Port of Riga E-mail dated 16/02/2021	<u>Federal Level</u> According to national legislation there are no restrictions on discharge of wash water from open loop scrubber systems in Latvia (within the territorial sea of Latvia).  <u>Port of Riga</u> There are no special rules regulating operation of class approved exhaust gas cleaning system operation in port of Riga, therefore discharge of washwater generated by the open loop EGCS is allowed in the port.
Lebanon	No					
Liberia	Yes					
Libya	No					
Lithuania	Yes	Allowed			<u>Port of Klaipeda</u> Deputy Harbour Master of Klaipeda Port E-mail dated 18/02/2021 with reference to the Lithuanian legislation  <a href="https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.389888/asr">https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.389888/asr</a>  Deputy Harbour Master of Klaipeda Port E-mail dated 19/02/2021 confirming the authorization	<u>Port of Klaipeda</u> Lithuanian legislation allows to use the EGCS open loop wash water discharges in Lithuanian EEZ as well, at the port of Klaipeda, those using the sodium hydroxide (caustic soda) as a main reagent. The pH according to Order of Lithuanian III ministers 2014 -06- 25 No. 1-170/D1-562/3-257-(E) and EU directives (MEPC.184(59)) strictly has to be less than pH 8.0 in the discharged wash water. The discharge of the wash water of the EGCS using the all other alternative chemical reagents is strictly prohibited at LTU areas, meaning that in the case of the EGCS mounted with the wash water system using the active reagents alternative to sodium hydroxide has to use CLOSED LOOP at the LTU areas.  The Lithuanian legislation allows to use the open loop scrubbers wash water discharges in Lithuanian EEZ as well, at the port of Klaipeda, only if those using the sodium hydroxide (caustic soda) as a main reagent and pH has to be strictly less than 8.0 in the discharged wash water. All other chemical reagents alternative to sodium hydroxide is strictly prohibited at LTU areas and has to use CLOSED LOOP method.
Madagascar	Yes					
Malaysia	Yes	Restricted	Ships transiting the Malacca Strait are permitted to use EGCS unless en route to a Malaysian port.	<u>Federal Level</u> Marine Department Malaysia Malaysia Shipping Notices (MSN 07/2019 and 08/2019) - 12/11/2019 and 05/12/2019		<u>Federal Level</u> Prohibits the use of open loop scrubbers within 12 nautical miles from land. Vessels calling at Malaysian ports must operate in closed loop mode or change over to compliant fuel before arrival. MSN 08/2019 brought clarifications to the previous one and the expectation to the ships transiting the Malacca Strait.

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Maldives	No					
Malta	Yes	Allowed	Regulations may vary from port to port and it is important to check each one individually.	<u>Federal Level</u> Transport Malta Merchant Shipping Notice 161/2020 dated 02/09/2020		<u>Federal Level</u> The Directorate wishes to remind all concerned of the requirements set out in MARPOL Annex VI and Directive (EU) 2016/802 limiting the sulphur content of marine fuels to 0.1% whilst operating in emission control areas, and the global sulphur limit of 0.5%, that became effective from 1 January 2015 and 1 January 2020 respectively; as well as regulating the use of exhaust gas cleaning systems.
Marshall Islands	Yes	Allowed			<u>Federal Level</u> Deputy Commissioner of Maritime Affairs E-mail dated 05/12/2018	
Mauritania	No					
Mauritius	No	Restricted		<u>Federal Level</u> Ministry of Ocean Economy, Marine Resources, Fisheries and Shipping Merchant Shipping Notice 2 of 2019 Implementation of IMO 2020 0.50% Global Sulphur Cap, 01/10/2019		<u>Federal Level</u> 3.9 However, (except in the case of innocent passage), ships proceeding to Mauritius or other islands forming part of the territory of Mauritius that use high sulphurfuel oil (HSFO) in combination with open-loop scrubber shall changeover from HSFO to compliant fuel oil whenever they enter the territorial waters of Mauritius i.e. within 12 nms from the shore. Environmental legislation presently inforce in Mauritius prohibits the discharge of wash water from open-loop scrubber.
Mexico	No	Allowed		<u>Federal Level</u> Ley de Navegación Y Comercio Marítimos Nueva Ley publicada en el Diario Oficial de la Federación el 1 de junio de 2006 (última reforma publicada DOF 07-12-2020)	<u>Federal Level</u> Secretaría de Marina Electronic Mail No. 1028/2021 dated 25/05/2021  <u>Federal Level</u> Secretaría de Marina Oficio 2112/2021 dated 03/09/2022 (it does not refer to the federal legislation)	<u>Federal Level</u> It is prohibited the unloading, spilling, dumping or any equivalent act, ballast, debris, garbage, sewage, as well as any element in any state of matter or energy that causes or may cause harm to life, ecosystems and marine resources, to human health or the legitimate use of the navigable waterways and the high seas that surround the Mexican marine areas. As there were no clear reference to scrubbers, CSA considered Mexico as allowed.  <u>Federal Level (no clear reference)</u> According to the Oficio 2112/2021 issued by the Mexican Marine Secretariat and due to the fact that Mexico is not a signatory of the MARPOL Annex VI, the use of the open loop scrubbers is not authorized in the territorial waters despite some of the ports are still accepting the discharge of the washwater without any major issues. In case it is not possible to switch to closed loop, the authority recommends that the any discharge water must be kept on board. Any and all discharge water from the scrubbers would then need to be unloaded to shore via a certified contractor, and as per guidance from the General Laws for Prevention and Integral Management of Residue and also the Laws on Sea Discharge. It is this contractor who would be tasked to manage the discharge of the scrubbers on shore.
Micronesia	No					
Monaco	Yes	Restricted		<u>Federal Level</u> Bulletin Officiel de la Principauté Sovereign Ordinance No.7004 of 20/07/2018		<u>Federal Level</u> Prevention of pollution of the atmosphere by ships and supplementing certain provisions of the Code of the Sea

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Country	MARPOL Annex VI Ratified?	Open Loop Wash Water Discharge	Exceptions	Official Public Announcement	Other Announcement or Information	Additional Information
Montenegro	Yes	Restricted			<u>Port of Kotor</u> Per communication from Harbor Authority (no official documentation yet)	<u>Port of Kotor</u> Use of EGCS prohibited within Kotor Bay (i.e. from the first headland in).
Morocco	Yes		Port of Casablanca (restricted)		<u>Port of Casablanca</u> Director of Port Policy and Regulations National Ports Agency E-mail dated 27/05/2022	<u>Port of Casablanca</u> The discharge of the washwater generated by the open loop EGCS is Not allowed in the Port of Casablanca (harbour limits/waiting anchorage and chenal acces). The use of alternatives sollutions is strongly favored.
Mozambique	No	Allowed	Port Areas (restricted)		<u>Port of Maputo</u> Harbour Master E-mail dated 18/03/2021  <u>Nacala Port</u> Chief Operating Officer E-mail dated 22/03/2021 with reference Decree 45/2006 - Regulamento Marinho e Costeiro	<u>Port of Maputo</u> a) Open loop scrubbers are allowed in the Mozambique territorial waters as long as they are working properly and following all the regulations. I am waiting on the link to the legislation to have it included in our data repository (hopefully more updated). b) Within ports, estuaries or bays where the water salinity values fall from the standard ones considered for salt water (1,025 or more), falling into brackish or sweet water category, OLS are not allowed and the ships must operate using MGO.  <u>Nacala Port</u> The discharge of the washwater is not allowed in the Nacala Port according to the Decree 45/2006.
Myanmar	No	Allowed				
Namibia	No					
Nauru	No					
Netherlands	Yes	Allowed				
New Zealand	No	Conditional	Auckland Canterbury Region Marlborough Region	<u>Federal Level</u> Ministry of the Environment, guidance on the use of exhaust gas cleaning systems (scrubbers) for ports, regional authorities and ships revised on 19/05/2020 (no official legislation)  <u>Canterbury Region</u> Guidance to Ship Operators, Industry and Port Companies Environment Cantebury - Regional Council	<u>Auckland</u> Harbor Master interpretation that the discharge of EGCS washwater is considered a violation of Clauses 15, 15A, 15B and 15C of the Resource Management Act.  <u>Marlborough Region</u> Harbour Master (Luke Grogan) E-mail dated 22/01/2020	<u>Federal Level</u> All ships carrying scrubbers and operating in New Zealand's territorial waters engage with the relevant port and regional authorities, and as a precautionary measure that where possible they avoid discharging scrubber effluent close to shore by utilizing alternate options such as: a) preparing for entry into New Zealand waters by carrying compliant low sulphur fuel in order to use this when operating in sensitive environments, as identified by the relevant regional authorities. b) operating closed loop scrubber functionality in zero discharge mode and retaining any effluent on board until able to dispose of at the next available port facility. c) discharging any open loop scrubber washwater outside territorial waters.
Nicaragua	No					

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Nigeria	Yes	Restricted		<u>Federal Level</u> Nigerian Ports Authority Notice to Mariners / Public Notice No. 4148		<u>Federal Level</u> Use of Exhaust Gas Cleaning Systems (EGCS) as an equivalence abatement measure under MARPOL Annex VI Regulation 4.1 is acceptable, provided it is approved by a Recognised Organisation (RO) in accordance with the IMO guidelines within MEPC.259(68). Please note that while within the nation's territorial waters, ships fitted with hybrid type of scrubbers shall switch to the closed-loop mode of operation, while ships fitted with open-loop scrubbers shall switch over to complaint fuel oil as discharge of its wash-water (scrubber sludge) is prohibited within the nation's waterways and by extension all the Pilotage Districts.
Niue	Yes					
Norway	Yes	Allowed	The World Heritage Fjords Port of Eidfjord Port of Stavanger	<u>Federal Level</u> Norwegian Maritime Authority's Regulation Section 14B, dated 01/01/2019  <u>Port of Eidfjord</u> Port Regulation  <u>Port of Stavanger</u> Port Handbook		<u>Federal Level</u> Ships in the world heritage fjords shall use either fuel with a low sulphur content, an approved closed loop exhaust gas cleaning system or an approved hybrid exhaust gas cleaning system in closed loop mode. Ships using an exhaust gas cleaning system to meet the sulphur requirement are required to use a device for reducing visible emissions to air.  <u>Port of Eidiford</u> Only closed loop allowed.
Oman	No	Restricted		<u>Federal Level</u> Marine Notice No. 09/2020 R. No. MOTCIT/Maritime/D.G/236/2020 Dated 06/11/2020		<u>Federal Level</u> 1. Ships that use open-loop ship exhaust gas- cleaning systems is prohibited from discharging washing water into Omani ports and territorial waters. 2. Ships that use hybrid exhaust gas cleaning systems must switch from the open loop mode to the closed loop mode when they reach the territorial waters and keep the washing residues on board and dispose of them in the designated facilities at the port. 3. Ships using closed-loop exhaust gas cleaning systems must be keep the washing residues onboard when they reach territorial water and dispose of it at designated facilities at the port.
Pakistan	No	Allowed	Port of Karachi Port of Bin Qasim	<u>Federal Level</u> Ministry of Maritime Affairs Ports & Shipping Wing Circular No. 0012020 dated 08/01/2020		<u>Federal Level</u> The discharge of wash-water from open-loop scrubbers is prohibited in Port. While in the Port, vessels fitted with hybrid type of scrubbers should switch to the closed-loop mode of operation. As for vessels fitted with open-loop scrubbers, they would need to switch over to compliant fuel instead. It would be advisable to carry out the switch to either closed-loop mode or to compliant fuel well in advance of the vessel's arrival at the port waters, so that any operational issues can be identified and dealt with before the ship arrival in Pakistani waters.

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Panama	Yes	Allowed	Panamá Canal	<u>Panamá Canal Authority</u> Canal de Panamá Notice to Shipping No. N-1-2020 dated 01/01/2020		<u>Panamá Canal Authority</u> The use of open loop scrubbers or hybrid scrubbers in open loop mode is prohibited in Panama Canal waters. Vessels opting to use closed loop scrubbers or hybrid scrubbers in closed/ zero discharge mode shall submit documents to the panama-canal authority as detailed in section 31 E. As much of the Panama Canal transit is in fresh or brackish water, open loop mode would not normally be as effective and would not normally be used.
Papua New Guinea	No					
Peru	Yes					
Philippines	Yes	Allowed			<u>Federal Level</u> Philippines Maritime Safety Service Eng. Maria Serena C. Casas, Maritime Safety Inspection Division E-mail dated 19/03/2021	<u>Federal Level</u> As of now, there is no provision prohibiting the discharge of wastewater from open loop ECGS.
Poland	Yes	Allowed			<u>Port of Dansk</u> Krzysztof Zaleski, Marketing and International Relations Specialist E-mail dated 18/04/2019	<u>Port of Dansk</u> There are no restriction to the use of the open loop scrubbers in either of the Polish ports: Gdansk, Gdynia and Szczecin.
Portugal	Yes	Allowed	- Port of Aveiro - Port of Leixões - Port of Lisbon - Port of Sines	<u>Federal Level</u> Decree-Law no. 170-B / 2014 dated 07/11/2014  <u>Ports Regulations</u>		<u>Federal Level</u> Although the Decree-Law no. 170/B/2014 allows the use of the open loop scrubbers as an alternative option to the compliant fuel, the ports' administrations can go beyond the federal regulation and apply additional restrictions. Use of open loop scrubbers are not allowed from entry of the ship into the port, along the port channel and at berth (moored), until the ship leaves the port. Only closed loop operation is allowed.
Qatar	No	Restricted		<u>Federal Level</u> Qatar Petroleum MIC [Mesaieed Industrial City] Port Information and Regulations Guide January 2020		<u>Federal Level</u> "Also, as per Qatari Environmental Law, wash water originated from the open loop scrubbers, containing chemicals and /or metals are PROHIBITED to be discharged in Qatari waters."
Romania	Yes	Allowed	Port limits		<u>Federal Level</u> Romanian Naval Authority E-mail dated 30/03/2021	<u>Federal Level</u> There is no restriction of using open-loop EGCS into Romanian territorial water but it's use is forbidden within port limits.
Russian Federation	Yes	Allowed			<u>Administration of the Baltic Sea Ports</u> E-mail f 17/03/2021  <u>St. Petersburg Port</u> Harbour Master, Aleksandr Volkov E-mail dated 23/03/2021	<u>Administration of the Baltic Sea Ports</u> The current legislation does not provide for a ban on the operation of vessels with an open-type exhaust gas cleaning system, with the discharge of flushing liquid.  <u>St. Petersburg Port</u> The discharge of washing water from open type scrubbers in the seaport of Bolshoy Port of St. Petersburg is not prohibited. The scrubber must be of an approved type.
Saint Kitts and Nevis	Yes					
Saint Lucia	Yes					

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Samoa	Yes					
Sao Tome & Principe	No					
Saudi Arabia	Yes	Restricted		<u>Federal Level</u> Saudi Ports Authority Circular No.(55) 2020 effective from 01/01/2020		<u>Federal Level</u> Per Articles 76 and 87 of the Saudi national legislation, Saudi Arabia accepts the discharge wash water parameters as per section 10 of IMO RESOLUTION MEPC.259(68). Also, regarding EGCS slop residue stored onboard, please note that Saudi Arabia currently does not have reception facilities for such residue.
Scotland	Yes	Allowed	Port of Firth of Forth & Tay	<u>Port of Forth &amp; Tay</u> Notice to Marines No 45 of 2019 Dated 02/12/2019		<u>Port of Forth &amp; Tay</u> As a precaution the use of open loop scrubbers on the Forth and Tay is prohibited until further notice.
Senegal	No					
Seychelles	Yes					
Sierra Leone	Yes	Allowed		<u>Federal Level</u> Sierra Leone Ports Authority Letter SLPA/GM/06/07/2021/1 dated 06/07/2021	<u>Harbour Master</u> E-mail dated 30/07/2021	<u>Federal Level</u> With the implementation at July 15, the ships have to follow the new local rules which are: - Usage of fuel oils with a sulfur content of 0.5 percent m/m or lower - Usage of an approved equivalent means of compliance such as EGCS but closed loop system only - Usage of non-fuel oil alternatives such as Liquefied Natural Gas (LNG)  Usage of open loop scrubber is prohibited Payment of an IMO Service charge called 'Vessel Compliance Certificate' valid for 7 days only Penalty charge of USD 15,000 - per case by non-compliance with the above rules (grace period is from July 15 to August 31, 2021)  <u>E-mail from Harbour Master</u> If the Exhaust Gas Cleaning System (open loop scrubbers) meets all the requirements recommended in the technical instruments provided by the IMO - MSC, then the ship will be allowed to use it in Sierra Leone. We will be more relaxed with our enforcement measures until 2023.
Singapore	Yes	Restricted		<u>Federal Level</u> Maritime and Port Authority of Singapore (MPA) Port Maritime Circular No. 19 dated 27/11/2019		<u>Federal Level</u> The discharge of wash water from scrubbers operating in open-loop mode is prohibited within the Singapore port limits from 1 January 2020. This does not apply to ships transiting the Traffic Separation Scheme (TSS) without calling into the Port of Singapore.
Slovenia	Yes	Restricted		<u>Federal Level</u> "Water Act" (Official gaz. no. 67/02) in detail: the Article 66, paragraph 4.	<u>Federal Level</u> Slovenian Maritime Authority E-mail dated 23/03/2021	<u>Federal Level</u> The discharge of washwater of open-loop EGCS is prohibited, furthermore even the use of an open-loop EGCS in Slovenian waters is prohibited (only closed-loop EGCS is allowed).  <u>Water Act</u> Article 66 (navigational practices related to water pollution) (4) Waste water generated on vessels shall be prohibited from being discharged into waters directly from vessels, except for unpolluted cooling water.

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Solomon Islands	No					
Somalia	No					
South Africa	Yes	Allowed		<u>Federal Level</u> South African Maritime Safety Authority Marine Notices No. 8 and 9 of 2019 Marine Notice No. 42/2020 dated 07/09/2020		<u>Federal Level</u> The acceptance of exhaust gas cleaning systems (scrubbers) as an equivalent arrangement under Regulation 4 of MARPOL Annex VI for compliance with the sulphur limit is currently based on the criteria stipulated in the 2015 Guidelines for Exhaust Gas Cleaning Systems (resolution MEPC.259(68)).
South Korea	Yes	Allowed		<u>Federal Level</u> Korean Register Technical Information Notice No.: 2020-ETC-06 Dated 09/07/2020		<u>Federal Level</u> 1. From 1st September 2020, ships at berth or at anchor will be required to use fuel with sulphur content not exceeding 0.10%. Fuel changeover is to be within 1 hour of completing anchoring/mooring and compliant fuel must continue to be used until 1 hour before heaving anchor/deberthing. 2. From 1st January 2022, changeover to 0.10% low sulphur fuel is to be completed at entry into the SECA and use of compliant fuel must continue while the vessel remains inside the SECA. 3. Alternatively, EGCS (Exhaust Gas Cleaning Systems) compliant with MARPOL requirements can be used providing the reduction in SOx emission is as least as effective as using 0.10% sulphur fuel. There are no restrictions on overboard washwater discharges from open-loop scrubbers.  <u>ECA Ports:</u> Beginning Jan 01 2022, use of 0.1% sulphur fuel, or alternate means of compliance, is mandatory in the Korea ECA. - Inchon area - Pyeongtaek & Dangjin area - Yeosu & Gwangyang area - Busan area - Ulsan & Onsan area
Spain	Yes	Allowed	Conditional: - Port of Bilbao - Port of Cadiz  Restricted: - Port of Cadiz - Port of Algeciras - Port of Cartagena - Port of Huelva - Port of Barcelona (at berth) - Canary Islands - Port of Gijón		Transcoma Notice  <u>Port of Cadiz</u> E-mail from the Head of the Safety and Environment Unit dated 25/08/2021  <u>Port of Gijón</u> E-mails from the Head of the Commercial Division dated 13/05/2021 and Port Authority from 14/05/2021	<u>Port of Bilbao</u> Use of EGCS restricted within port limits. Documentation must be submitted and approved by the harbor master before EGCS can be used in port.  <u>Port of Cadiz</u> The open loop scrubbers are not allowed in the ports administrated by the APBC.  <u>Canary Islands</u> Clarification from the Las Palmas and Santa Cruz de Tenerife port authorities conservatively applying the Spanish Ports Law.  <u>Port of Gijón</u> The discharge of the washwater is not allowing in the Puerto de Gijón and that the scrubbers can be used only while anchoring.
Sri Lanka	No					
St. Vincent & Grenadines	Yes					
Sudan	No					

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Suriname	No					
Sweden	Yes	Allowed	<ul style="list-style-type: none"> <li>- Port of Trelleborg</li> <li>- Petroport</li> <li>- Port of Stenungsund</li> <li>- Port of Gothenburg</li> <li>- Port Oxelösund</li> <li>- Port of Stockholm (not written)</li> </ul>	Ports Regulations	<p><u>Port Oxelösund</u> E-mail from the CEO of the port dated 21/05/2021</p> <p><u>Port of Visby</u> E-mail from the Head of Cruise dated 18/05/2022</p>	<p><u>Petroport, Stenungsund</u> Section 12 of harbour regulations states that “vessels calling at the Port are not allowed to use Open-loop System for scrubbers”.</p> <p><u>Port of Trelleborg</u> Paragraph 29 :“...nor is it permitted to discharge scrubber water from onboard treatment plants into the harbour basin”</p> <p><u>Port of Gothenburg</u> Item 8.10: It is not permitted to discharge contaminated water within the port area. Scrubbers used for exhaust gas cleaning are only permitted if operated in close loop mode.</p> <p><u>Port Oxelösund</u> Open loop generated washwater is not allowed within the port basin.</p> <p><u>Port of Visby (allowed)</u></p>
Syrian Arab Republic	Yes					
Tanzania	No					
Thailand	No	Restricted				
Timor-Leste	No					
Togo	No					
Tonga	Yes					
Trinidad & Tobago	Yes	Restricted		<p><u>Federal Level</u> Shipping Notice SN5-2019 Ministry of Works and Transport Maritime Services Division Dated 19/07/2019</p>	<p><u>Federal Level</u> Trinidad and Tobago Port Authority E-mail dated 10/12/2021</p>	<p><u>Federal Level</u> Discharging of EGCS Wash water: 1. The Discharging of wash water from open loop mode EGC systems (Scrubber) is prohibited when ship is within limit of Port of Port-of-Spain including the anchorage area. 2. Discharging of wash water from open loop mode EGC systems (Scrubber) into Trinidad and Tobago territorial waters and exclusive economic zone (EEZ) is not permitted unless it can be proven that the discharge of wash water complies with the IMO 2015 guidelines for exhaust gas cleaning systems (MEPC.259(68)) and there is no negative impact on marine ecosystems.</p> <p><u>Shipping Notice SN5-2019</u> Where EGCS are being utilized within Trinidad and Tobago waters, washwater discharges shall be authorized by the Maritime Services Division. Washwater monitoring should be continuous and shall include the parameters pH, PAH, turbidity and temperature and where discharge occurs, the washwater shall be in compliance with the limits set out in Resolution MEPC. 259 (68) or applicable MARPOL Guidelines.</p>
Tunisia	Yes					



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Turkey	Yes	Restricted		<u>Federal Level</u> Turkish Ministry of Environment and Urbanization Circular E-84973951-140.99-698452 Dated 06/04/2021	<u>Federal Level</u> Turkish Ministry of Transport and Infrastructure E-mail dated 11/03/2021	<u>E-mail from Turkish Ministry of Transport and Infrastructure</u> In our country, there aren't restrictions or prohibitions regarding the discharge of open loop wash water and scrubber types. However, it will be banned by the Ministry of Environment and Urbanization in the near future. For this reason, we don't recommend the discharge of open loop wash water into the sea.  <u>Circular from Turkish Ministry of Transport and Infrastructure</u> It is prohibited to discharge scrubber washing water into the sea in our country's territorial waters.
Tuvalu	Yes					
Ukraine	Yes					
United Arab Emirates		Allowed	- Port of Fujairah - Port of Dubai	<u>Port of Fujairah</u> Notice to Mariners No. 252 dated 22/01/2019  <u>Port of Dubai</u> Guidelines for Vessels Calling to Dubai Territorial Waters		<u>Port of Fujairah</u> EGCS is prohibited. Ships will have to use compliant fuel once the IMO 2020 sulphur cap comes into force.  <u>Port of Dubai</u> The use of EGCS is prohibited within Dubai territorial waters.
United Kingdom	Yes	Allowed	- Royal Portbury Dock (conditional) - Port of Felixstowe (restricted) - Bristol Port Company (restricted) - Cromarty Firth Port (restricted)	<u>Bristol Port Company</u> Notice to Mariners 2 of 2020 dated 01/01/2020  <u>Cromarty Firth Port</u> Notice to Mariners No. 11-2022 dated 15/03/2022	<u>General Guidelines</u> E-mail from MCA dated 27/03/2019  <u>Royal Portbury Dock</u> E-mail from the Marine Admin of The Bristol Port Company dated 26/03/2021  <u>Port of Felixstowe</u> E-mail from the Harbour Master dated 28/05/2021	<u>General Guidelines</u> Local ports and harbours have the right to impose stricter water quality requirements to any transport or industrial sector, including ship operations, in order for their region to meet water quality requirements under the Water Framework Directive.  <u>Royal Portbury Dock</u> Open loop scrubbers are allowed with permission of harbour authority on case by case basis.  <u>Port of Felixstowe</u> "The use of Exhaust Gas Cleaning Systems (EGCS or 'scrubbers') is permitted within HHA's area of jurisdiction provided that they are fully functioning and certified as meeting IMO standards. Where hybrid-type scrubbers are fitted they should be used in closed-mode whilst in port."  <u>Bristol Port Company</u> Open loop scrubber systems (or hybrid scrubber systems operating in open loop mode) will not be permitted to be used in the enclosed environments of Avonmouth and Royal Portbury Docks. Vessels are requested to switch to the appropriate low sulphur fuel, in accordance with the regulations prior to arrival at the port.  <u>Cromarty Firth Port</u> In order to ensure best practice in meeting the Habitats (Directive 92/43/EEC) and Water Framework Directive (Directive 2008/105/EC) Vessels entering port limits should: (a) Switch EGCS's off or to a closed loop mode, thus stopping any discharge of wash waters to the marine environment.
Uruguay	Yes					

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USA	Yes	Allowed	<ul style="list-style-type: none"> <li>- Ports of California</li> <li>- Ports of Connecticut</li> <li>- Port Everglades</li> <li>- Ports of Hawaii (conditional)</li> <li>- Port of Seattle</li> <li>- U.S. National Marine Sanctuaries</li> </ul>	<p><u>Ports of California</u> California Air Resource Board (CARB Marine Notice 1-2020)</p> <p><u>Ports of Connecticut</u> 2013 Vessel General Permit (VGP) dated 28/13/2013</p> <p><u>Port Everglades</u> Port Everglades Harbor effective 25/01/2020 Item 1015 of Port Everglades Tariff No.12</p> <p><u>Ports of Hawaii</u> Vessel General Permit for Discharges Incidental to the Normal Operations of Vessels (VGP) - 28/03/2013</p> <p><u>Port of Seattle</u> Port of Seattle Terminals Tariff No. 5, Item 4001</p> <p><u>U.S. National Marine Sanctuaries</u> Conservative application of 15 CFR Part 922 <a href="https://www.ecfr.gov/cgi-bin/text-idx?SID=0f86f4c323df18f3bde2cd8a5cbe2270&amp;mc=true&amp;node=pt15.3.922&amp;rgn=div5">https://www.ecfr.gov/cgi-bin/text-idx?SID=0f86f4c323df18f3bde2cd8a5cbe2270&amp;mc=true&amp;node=pt15.3.922&amp;rgn=div5</a></p>		<p><u>Ports of California</u> The regulations prohibits the use of scrubbers. However, the use of alternative means of compliance such as scrubbers may be allowed if a Temporary Experimental or Research Exemption has been given, as per CARB MN 2017-1. A reminder of the requirements was issued on 21/01/20 at CARB MN 2020-1.</p> <p><u>Ports of Connecticut</u> Section 6.5.9 of the 2013 Vessel General Permit (VGP) confirms that discharge of wash water into Connecticut waters from any vessel covered under the VGP or small Vessel General Permit (sVGP) is prohibited.</p> <p><u>Port Everglades</u> The discharge of ballast water and a ship engine exhaust scrubber washwater effluent from a vessel in Port Everglades harbor is prohibited unless performed in conformance with Chapter 27, Pollution Control, Article V, 27-193(b)(3)a., of the Broward County Code of Ordinances.</p> <p><u>Ports of Hawaii</u> Section 6.7 of the 2013 VGP states that the conditional section 401 WQC (Water Quality Certification) effectively allows for discharge of wash water in Hawaii, subject to compliance with certain terms stipulated in the same section of the 2013 VGP.</p> <p><u>Port of Seattle</u> Passenger cruise ships will not discharge graywater, blackwater, or exhaust gas cleaning system wash water, whether treated or not while at berth in Port Terminals.</p>
Vanuatu	Yes					
Venezuela	No					
Vietnam	Yes					
Yemen	No					