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MEDITERRANEAN ACTION PLAN

Meeting of the Correspondence Group on GES and Targets
Pollution and Litter Cluster

Sarajevo (Bosnia & Herzegovina), 29-30 October 2012

EXISTING TARGETS AND EQO REGARDING POLLUTION IN THE FRAMEWORK OF UNEP/MAP MEDPOL PROGRAMME

Delegates are kindly requested to bring their documents to the meeting

UNEP/MAP
Athens, 2012

Introduction

At their ECAP Coordination group meeting, held on 29-30 May 2012, Athens, Greece, the Contracting parties requested the Secretariat to prepare a document that should take stock of all targets agreed in the framework of MAP and prepare a background document that should support the discussions in the process for the determination of GES and their respective targets.

The present document presents the environmental quality standards (EQS), pressure reduction target, operational and management targets adopted by the Meetings of the Contracting parties since 1989 with the aim to further specify their commitments and obligations of the parties as well as to facilitate their efforts for the implementation of the Barcelona Convention and the Protocols addressing pollution reduction/elimination and prevention in the Mediterranean.

This document is prepared for the purpose of supporting the discussions of the Corresponding group on pollution with regard to GES and target setting under Ecological Objectives respectively: eutrophication, contaminants and to some extent, marine litter. There is no previous work with regard to targets with regard to noise that is a new field and challenge to address marine pollution in the MAP system.

The MAP obligations and commitments taken in the form of targets and EQS are set at 3 major levels:

At legal level/international law

1. Barcelona Convention

2. Four Protocols that contain major legally binding obligations to eliminate and phase out marine pollution from different sources and substances

In the scope of the ECAP ecological objectives addressed by the present document, the Convention and the protocols provide for:

LBS Protocol

a) The parties undertake to eliminate pollution deriving from land-based sources and activities, in particular to phase out inputs of the substances that are toxic, persistent and liable to bioaccumulation listed in annex I (POPs, Organo-P, Organo-tin, PAH, Metals, Lub oil, radioactive, biocides, pathogenic M/O, oil and petroleum HC, CN- and F-, non-biodegradable detergents, nutrients (N and P), litter, thermal discharge, acid or alkaline, non-toxic compounds leading to DO depletion, non-toxic substances interfering with legitimate use of the sea, non-toxic that affect physical or chemical characteristics of the sea).

Offshore Protocol

b) The disposal of harmful or noxious substances and material released from the activities related to Protocol against pollution resulting from exploration and exploitation of the continental shelf and the seabed and its subsoil and listed in Annex I is prohibited (Mercury, Cadmium, Organotin, Organo-P, Organohalogen compounds, crude oil and oily sludge, persistent synthetic wates – plastics, carcinogenic and mutagenic substances, radioactive subst.). Other substances can be released into marine environment subject to special permit.

c) the incineration at sea is prohibited

Dumping Protocol

d) the dumping of materials is prohibited with the exception of and subject prior special permit of dredged material, fish waste or organic materials resulting from the processing of fish and other marine organisms, vessels, until 31 December 2000; *)* platforms and other man-made structures at sea, provided that material capable of creating floating debris or otherwise contributing to pollution of the marine environment has been removed to the maximum extent, without prejudice to the provisions of the Protocol concerning Pollution Resulting from Exploration and Exploitation of the Continental Shelf, the Seabed and its Subsoil; inert uncontaminated geological materials the chemical constituents of which are unlikely to be released into the marine environment.

Hazardous Wastes Protocol

e) The Parties shall take all appropriate measures to reduce to a minimum, and where possible eliminate, the generation of hazardous wastes. The Parties shall also take all appropriate measures to reduce to a minimum the transboundary movement of hazardous wastes, and if possible to eliminate such movement in the Mediterranean. To achieve this goal, Parties have the right individually or collectively to ban the import of hazardous wastes.

Prevention and Emergency Protocol

f) The Parties shall cooperate:

a) to implement international regulations to prevent, reduce and control pollution of the marine environment from ships; and,

b) to take all necessary measures in cases of pollution incidences.

At strategic level

2. the Strategies adopted by the parties to lead and facilitate:

c) the implementation of the LBS Protocol :Strategic Action Programme to Combat Pollution from Land Based Sources (SAP-MED) adopted in 1997 and covers the period of implementation 2000-2025

d) the implementation of the Prevention and Emergency Protocol adopted in 2002 and in force since 2004: The regional strategy to prevent, abate The Regional **Strategy** for the. Prevention of and Response to. Marine Pollution from Ships adopted by the 14th Contracting parties meeting, 2005, Portoroz, Slovenia.

3. Mediterranean Strategy for Sustainable Development adopted by the 14th meeting of the Contracting parties, Portoroz, Slovenia, 2005

4. Five year strategic programme of work of MAP adopted by the 16th meeting of the Contracting Parties, Marrakesh, 2009 to lead the overall implementation of Barcelona Convention and its Protocols

At operational level through common measures adopted by COP decisions

5. The common measures on concrete sectors and contaminants adopted since 1987 by the meetings of the Contracting Parties in the framework of Articles 5 and 7 of the LBS Protocol

6. The legally binding measures, programmes and timeframes for specific sectors and contaminants referred to as the Regional Plans adopted by the Meetings of the Contracting Parties in the framework of Articles 5 and 15 of the LBS protocol adopted in 2009 and 2012

The following decisions and strategic documents were reviewed for the purpose of the present document:

- Interim environmental quality criteria for bathing waters (1985)
- Interim environmental quality criteria for mercury (1985)
- Measures to prevent mercury pollution (1987)
- Environmental quality criteria for shellfish waters (1987)
- Measures for the control of pollution by used lubricating oils (1989)
- Measures for the control of pollution by cadmium and cadmium compounds (1989)
- Measures for the control of pollution by organotin compounds (1989)
- Measures for the control of pollution by organohalogen compounds (1989)
- Measures for the control of pollution by organophosphorus compounds (1991)
- Measures for the control of pollution by persistent synthetic materials (1991)
- Measures for the control of radioactive pollution (1991)
- Measures for the control of pollution by pathogenic microorganisms (1991)
- Measures for the control of pollution by carcinogenic, teratogenic and mutagenic substances (1993)
- Strategic Action Programme (SAP) to Address Pollution from Land-Based Activities (SAP MED) (1997)
- Mediterranean Strategy for Sustainable Development, 2005
- Regional Strategy for the. Prevention of and Response to. Marine Pollution from Ships, 2005
- Regional Plan on the reduction of BOD5 from urban waste water in the framework of the implementation of Article 15 of the LBS Protocol (2009)
- Regional Plan on the elimination of Aldrin, Chlordane, Dieldrin, Endrin, Heptachlor, Mirex and Toxaphene in the framework of the implementation of Article 15 of the LBS Protocol (2009)

- Regional Plan on the phasing out of DDT in the framework of the implementation of Article 15 of the LBS Protocol (2009)

- Regional Plan on the elimination of Alpha hexachlorocyclohexane; Beta exachlorocyclohexane; Hexabromobiphenyl; Chlordecone; Pentachlorobenzene; Tetrabromodiphenyl ether and Pentabromodiphenyl ether; Hexabromodiphenyl ether and Heptabromodiphenyl ether; Lindane; Endosulfan, Perfluorooctane sulfonic acid, its salts and perfluorooactane sulfonyl fluoride, in the framework of the implementation of Article 15 of the LBS Protocol (2012)

- Regional Plan on the reduction of inputs of Mercury in the framework of the implementation of Article 15 of the LBS Protocol (2012)

- Regional Plan on the reduction of BOD5 in the food sector in the framework of the implementation of Article 15 of the LBS Protocol (2012)

- Criteria and Standards for bathing waters quality in the framework of the implementation of Article 7 of the LBS Protocol (2012)

- International Convention for the Prevention of Pollution from Ships (MARPOL)

    - Annex I - Regulations for the Prevention of Pollution by Oil (entered into force 2 October 1983)
    - Annex II - Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk (entered into force 2 October 1983)
    - Annex III - Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form (entered into force 1 July 1992)
    - Annex IV - Prevention of Pollution by Sewage from Ships (entered into force 27 September 2003)
    - Annex V - Prevention of Pollution by Garbage from Ships (entered into force 31 December 1988)
    - Annex VI - Prevention of Air Pollution from Ships (entered into force 19 May 2005)
- International Convention on the Control of Harmful Anti-fouling Systems on Ships

Annex 1. Targets related to land based sources of pollution

Existing targets and EQO regarding pollution in the framework of UNEP/MAP MEDPOL Programme

Target type	**Environment Quality /State**		**Pressure**		**Operational/programmes and measures/management**		
Sector/substance			**2005-2010**	**2025**	**2005 SAP MED target(s)**	**2010- 2019**	**2025 SAP MED target(s)**
Disposal of Municipal waste water (sewage)					Disposal in conformity with the LBS Protocol for cities Exceeding 100.000 inhabitants and in areas of concern	**By 2015 or 2019** **-** National BOD_5 ELVs[1] for urban waste waters after treatment in the *a) LBS Protocol Area less than 50 mg/l* , assuming a performance of reduction of the influent load of 70-90 % (secondary treatment) b) *LBS Protocol Area – marine outfalls* (ref. Art. 7 LBS Protocol) less than 200 mg/l, assuming a performance of reduction of the influent load of 20 % (primary treatment). - These ELVs should only be adopted taking into account local conditions, and provided that total	Disposal in in conformity with the LBS Protocol for all cities and agglomerations

[1] ELV: Emmission limit values mean maximum allowable pollutant concentration to be finally discharged to the receiving water environment

Target type	Environment Quality /State		Pressure		Operational/programmes and measures/management		
Sector/substance			2005-2010	2025	2005 SAP MED target(s)	2010- 2019	2025 SAP MED target(s)
						loads do not affect the receiving marine environment.	
Environment sound disposal of urban solid waste management					Disposal in conformity with the LBS Protocol for cities exceding100.000 inhabitants and areas of concern (SAP MED 1997)		Disposal in conformity with the LBS Protocol in all agglomerations system
Access to sanitation						By 2015 Halve the number of inhabitants without access to sanitation (MSSD, 2005)	
Levels of Air pollution and air emmissions	**By 2005:** Levels of air pollutants in cities Exceeding 100.000 inhabitants and areas of concern are in conformity with the LBS Protocol, (SAP MED, 1997)	**By 2025** Levels of air pollutants in cities to be in conformity with the LBS Protocol and other agreed international and national provisions (SAP MED, 1997)					**By 2025**: Air emissions from industrial point sources in the Protocol area to be in conformity with the LBS Protocol and other agreed international and national provisions

Target type	Environment Quality /State		Pressure		Operational/programmes and measures/management		
Sector/substance			**2005-2010**	**2025**	**2005 SAP MED target(s)**	**2010- 2019**	**2025 SAP MED target(s)**
Industrial pollution (point source discharges and emissions)							
a) TPB substances (toxic, persistent and able to bio-accumulate)			**by 2007** a) 50% reduction of discharges, emissions and losses of TPB and polluting substances in areas of concern and hot spots **(SAP MED, 1997)**				**By 2025** Industrial pollution from point sources in conformity with LBS & standards and other international and national
b) BOD from industrial sources and specifically from food sector			**By 2010** 50% reduction of BOD from industrial sources (**COP 12, Catania, Italy, 2003)**			**By 2014** **Food sector as outlined below**[2] that discharge more than 4,000 p.e into water bodies shall meet the following requirements (24-hour values): -Chemical Oxygen Demand (COD) less than 160 mg/l or -Total Organic Carbon (TOC)less than 55 mg/l -BOD5 (or BOD7) less than 30 mg/l	

[2] Dairy industry, Fruit and vegetable processing, Breweries, Winery and Distilleries, Fish processing industry, Sugar manufacturing, Vegetable oil processing Canning and preserving, Meat processing and slaughtering

Target type	Environment Quality /State	Pressure		Operational/programmes and measures/management		
Sector/substance		2005-2010	2025	2005 SAP MED target(s)	2010- 2019	2025 SAP MED target(s)
c)POPs	The Contracting Parties agree as follows from 1 January 1991: (a) To adopt an environmental quality objective in coastal waters **of 25 µg 1-1 for total DDT in** terms of Article 5 and Annex I of the LBS Protocol	**By 2005** - 50% reduction of priority 12 POPs inputs to marine environment **By 2010** - Phase out inputs of 9 pesticides and PCBs and reduce to the fullest possible extent hexachloro benzene, dioxins and furans (SAP MED, 1997)		**By 2005** To collect and dispose all PCBs in a sound environmental manner	**By 2013** 1. Eliminate the production and import export of 10 POPs/ chemical compounds under the Stockholm convention[3] 2. The chemical compounds are (a) handled, collected, transported and stored in an environmentally sound manner; (b) disposed of in such a way that the persistent organic pollutant content is destroyed or irreversibly transformed so that they do not exhibit the characteristics of persistent organic pollutants. (Exemptions are foreseen) **COP 17, 2012, Paris: Decision IG 20/8.3**	

[3] Alpha hexachlorocyclohexane; Beta exachlorocyclohexane; Hexabromobiphenyl; Chlordecone; Pentachlorobenzene; Tetrabromodiphenyl ether and Pentabromodiphenyl ether; Hexabromodiphenyl ether and Heptabromodiphenyl ether; Lindane; Endosulfan, Perfluorooctane sulfonic acid, its salts and perfluorooactane sulfonyl fluoride

Target type	Environment Quality /State	Pressure		Operational/programmes and measures/management		
Sector/substance		2005-2010	2025	2005 SAP MED target(s)	2010- 2019	2025 SAP MED target(s)
-Organohalogen compunds	COMMON MEASURES ON POLLUTION BY ORGANOHALOGEN COMPOUNDS, 1989	**Organohalogen** By 2010: Reduce discharges	**Organo halogen** BY 2025 Eliminate to the fullest extent possible pollution caused by emissions, discharges and losses		**By 2013** The Parties shall prohibit and/or take legal and administrative measures necessary to eliminate: (a) the production and use of DDT, subject to the provisions of Appendix A; and (b) the import and export of DDT and its waste in accordance with paragraph 2 of this Article The Parties shall ensure that this chemical as an active substance or as a waste is imported or exported only: (a) for the purpose of environmentally sound disposal according to the (international law) (b) for a use or purpose which is permitted for that Party under Appendix A. Exemptions: use in emergency circumstances for disease vector control **COP 16, Marrakesh, 2009; Decision IG 19.9**	

Target type	Environment Quality /State	Pressure		Operational/programmes and measures/management		
Sector/substance		2005-2010	2025	2005 SAP MED target(s)	2010- 2019	2025 SAP MED target(s)
					The Parties shall prohibit and/or take legal and administrative measures necessary to eliminate: (a) the production and use of the chemicals (Aldrin, Chlordane, Dieldrin, Endrin, Heptachlor, Mirex and Toxaphene), and (b) their import and export of the chemicals and their wastes. A chemical as active substance and or as a waste is imported or exported only: (a) for the purpose of environmentally sound disposal according to (international law) **COP 16, Marrakesh, 2009, Decision IG 19.8**	

Target type	Environment Quality /State		Pressure		Operational/programmes and measures/management		
Sector/substance			2005-2010	2025	2005 SAP MED target(s)	2010- 2019	2025 SAP MED target(s)
d) PAH				25% reduction of PAH inputs (SAP MED), 1997	To phase out to the fullest possible extent the PAH inputs (SAP MED 1997)		
e) Heavy metals (Hg, Cd, Pb)	**Cadmium** The contracting parties **as of January first 1991 adopt**, in principle, **an eventual water quality objective of a maximum of 0.5 µg cadmium per litre in marine water** (IG 1: COMMON MEASURES ON POLLUTION BY CADMIUM AND CADMIUM COMPOUNDS 1989), UNEP(OCA)/MED IG.1/5 ANNEX V page 7-10		**Heavy metals input** By 2000 25% reduction by 2005 50% reduction (SAP MED, 1997) By 2010 to -phase out to the fullest possible extent organo-mercuric compounds, - reduce to the fullest possible extent the organo-lead and organo-tin compunds By 2010 -50% reduction of organometalic compunds	Phase out discharges, emissions and losses	Reduce discharges Guidelines for BAT and BEP in industries sources of Hg, Cd, Pb	**Cadmium** the Contracting Parties as from 1 January 1991: (a) Adopt a limit value of 0.2 mg cadmium per litre discharged (monthly flow-weighted average concentration of total cadmium) for effluent discharges from industrial plants into the Mediterranean Sea before dilution. The above limit value does not apply to the phosphate fertilizer industry, but each Mediterranean country should fix its own national value pending a new decision by the Contracting Parties	
	Hg and Cd concentration increase at a radius of 5 km from the outfall in biota and sediments to be no more than 50% than background values					Relevant outfall structures shall be adjusted in such a way as to achieve maximum dilution in the mixing zone adjacent to the outfall and monitoring sediments and biota to ensure an increase of not more than 50% above background levels in the case of new plants, and achieve a progressive decrease towards the same objective in areas affected by existing plants. (UNEP(OCA)/MED IG.1/5 ANNEX V page 7-10) COP 1989.	

Target type	Environment Quality /State	Pressure		Operational/programmes and measures/management		
Sector/substance		2005-2010	2025	2005 SAP MED target(s)	2010- 2019	2025 SAP MED target(s)
					<u>Mercury</u> -Prohibition of installation of new Chlor alkali plants using mercury cells; -Prohibition of installation of vinyl chloride monomer production plants using mercury as a catalyst; -Releases of mercury from the activity of Chlor alkali plants shall cease by **2020 at the latest**; -Total releases of mercury (to the air, the water and to the products) from existing Chlor alkali plants are progressively reduced until their final cessation with the view not to exceed 1.0g per metric tons of installed chlorine production capacity in each plant. In doing so, the air emissions should not exceed 0.9g per metric tons of installed chlorine production capacity in each plant. The Parties shall adopt by 2015 and 2019 National ELVs for Mercury emissions from other than Chlor Alkali industry as follows (for chemical industries using Hg catalyst, manufacturing of batteries and non-ferrous metal industries): ELV 2015: 50 mg/l effluent ELV 2019: 5 mg/l effluent (target values, which will be considered for revision by 2015, with a view to establishing new ELVs) National ELVs for Mercury emissions from incineration plants: Waste gas 0.05 mg/ Nm^3 Reduce the inputs of Mercury emissions from other sectors and use alternatives as appropriate Isolate and contain the mercury containing wastes to avoid potential contamination of air, soil or water **COP 17, Paris; Decision IG 20/8**	

Target type	Environment Quality /State		Pressure		Operational/programmes and measures/management			
Sector/substance			**2005-2010**	**2025**	**2005 SAP MED target(s)**	**2010- 2019**		**2025 SAP MED target(s)**
f) Other Heavy metals (Zn, Cu, Cr)				By 2010 - Reduce discharges, emissions and losses - Eliminate to the fullest possible extent pollution in the Mediterranean caused by Zn, Cu and Cr	Eliminate discharge			
Radioactive substances				Eliminate inputs				
Nutrients and suspended solids, including municipal sewage, industrial wastewater				50% reduction from industry				to dispose all waste water from industrial installations in conformity with the provisions of the LBS Protocol.

Target type	Environment Quality /State		Pressure		Operational/programmes and measures/management		
Sector/substance			**2005-2010**	**2025**	**2005 SAP MED target(s)**	**2010- 2019**	**2025 SAP MED target(s)**
Impact from agriculture				To reduce nutrient inputs, from agriculture and aquaculture practices into areas where these inputs are likely to cause pollution			
Hazardous waste			By 2010 20% reduction of HW generation (Regional Plan on HW, !3th CP meeting in Catania, Italy, 2003)			By 2010 to dispose 50 % of the hazardous waste generated, in a safe and environmentally sound manner and in conformity with the provisions of the LBS Protocol and other internationally agreed provisions (SAP MED, 1997)	to dispose all hazardous wastes in a safe and environmentally sound manner and in conformity with the provisions of the LBS Protocol and other international agreed provisions
Obsolete chemicals					to collect and dispose all obsolete chemicals in a safe and environmentally sound manner		
Lube-oil					to collect and dispose 50 % of used lubricating oil in a safe and environmentally sound manner		To collect and dispose all lube oils in a environ-mentally sound manner

<table>
<tr><th>Target type</th><th rowspan="2">Environment Quality /State</th><th colspan="2">Pressure</th><th colspan="3">Operational/programmes and measures/management</th></tr>
<tr><th>Sector/substance</th><th>2005-2010</th><th>2025</th><th>2005 SAP MED target(s)</th><th>2010- 2019</th><th>2025 SAP MED target(s)</th></tr>
<tr><td>Batteries</td><td></td><td></td><td>By 2007-2010

20% reduction of generation of batteries</td><td></td><td>By 2010

To dispose 50% of used batteries in an environ-mentally sound manner</td><td>to dispose all used batteries in a safe and environmentally sound manner and in conformity with the provisions of the Protocol and other internationally agreed provisions</td></tr>
<tr><td>Bathing water</td><td>
<table>
<tr><td>Category</td><td>A</td><td>B</td><td>C</td><td>D</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Limit values</td><td><100*</td><td>101-200*</td><td>185**</td><td>>18 **(1)</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Water quality</td><td>Excel-lent quality</td><td>Good quality</td><td>Sufficient</td><td>Poor quality/ Immediate Action</td></tr>
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* 95th percentile intestinal enterococci/100 mL (applying the formula 95th Percentile = antilog (μ + 1,65 σ)
** 90th percentile intestinal enterococci/100 mL (90th Percentile=antilog (μ + 1,282 σ), μ=calculated arithmetic mean of the log10 values; σ= calculated standard deviation of the log10 values.</td><td></td><td></td><td colspan="3"></td></tr>
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Annex 2. Obligations related to sea based sources of pollution

Appendix I.

MARPOL Annex I – Oil (Mediterranean Sea a Special Area)

Ship type and size	Oil originating from…..	Discharge criteria
All ships of 400 gross tonnage and above	Machinery Spaces	**To be retained on board** OR **No Discharge** except when: *the ship is *en route;* *the oily mixture is processed through an oil filtering equipment as required in the applicable parts of regulation 14 of Annex I (for ships between 400 and 10.000 GT regulation 14.6; for ships ≥10.000 GT regulation 14.7); * the oil content of the effluent without dilution does not exceed 15 ppm; * on oil tankers, the oily mixture does not originate from cargo pump-room bilges and is not mixed with oil cargo residues AND the oil filtering equipment should be provided with alarm arrangements and arrangements that the discharge is automatically stopped when the content of the effluent exceeds 15 ppm.
Ships of less than 400 gross tonnage		**To be retained on board** OR **No Discharge** except when: Oil or oily mixtures is discharged into the sea under the following conditions: *the ship is *en route;* * equipment approved by the Administration to ensure that the effluent does not exceed 15 ppm shall be in operation * on oil tankers, the oily mixture does not originate from cargo pump-room bilges and is not mixed with oil cargo residues
Any oil tanker	Cargo Tanks	**No Discharge** except for clean or segregated ballast.

Appendix II.

MARPOL Annex II – Noxious Liquid Substances (NLS)

Control of discharges

Any discharge into the sea of products in Category X, Y or Z is prohibited unless such discharges are made in compliance with the requirements in regulation 13 of Annex II.

Before any discharge into the sea takes place the following operation shall be carried out

Cat	Operation
X	Prewash
Y	High viscous and solidifying products →prewash Non high viscous and non solidifying products →efficient stripping
Z	Efficient stripping

Any subsequent discharge of water added to the tank shall take place under the following conditions:

- the ship is *en route*;
- the ship has a speed of at least 7 knots (non self propelled 4 knots)
- the discharge is made below the waterline
-the distance from the nearest land is not less than 12 nautical miles
-the depth of the water is not less than 25 metres

On request of the ship's master an exemption *of the prewash (regulation 13.4)* may be granted when:

- the unloaded tank will be reloaded with the same or a compatible cargo;
- the prewash will take place in another port – confirmation of available shore reception facilities is present in writing; or
- the cargo residue will be removed by ventilation.

Appendix III.

MARPOL Annex III – NLS

- **Jettisoning prohibited.**

Appendix IV.

MARPOL Annex IV – Sewage

Sea area	Discharge criteria
Within 3 nautical miles from land	**No discharge** except from an approved sewage treatment plant certified to meet regulations 9.1.1 and 11.1.2
Between 3 and 12 nautical miles from the nearest land	**No discharge** except either; (1) from an approved sewage treatment plant certified to meet regulations 9.1.1 and 11.1.2; or (2) from an approved system for comminuting and disinfecting sewage meeting regulations 9.1.2 and 11.1.1 first part
More than 12 nautical miles from land	**Discharge** from either (1) or (2) above; or Sewage which is not comminuted or disinfected when the ship is proceeding at not less than 4 knots and the rate of discharge is approved by the Administration. Reference is made to resolution MEPC 157(55) - Recommendation on standards for the rate of discharge of untreated sewage from ships.

Appendix V.

MARPOL Annex V - Garbage (Mediterranean Sea – Special Area)

Type of garbage	Ships within special areas	Offshore platforms (more than 12 nm from land) and all ships within 500 m of such platforms
Food waste comminuted or ground	**Discharge permitted** ≥12 nm from the nearest land, en route and as far as practicable	**Discharge permitted**
Food waste not comminuted or ground	**Discharge prohibited**	**Discharge prohibited**
Cargo residues[4] not contained in wash water	**Discharge prohibited**	**Discharge prohibited**
Cargo residues[1] contained in wash water	**Discharge permitted** ≥12 nm from the nearest land, en route, as far as practicable and subject to two additional conditions[2]	**Discharge prohibited**
Cleaning agents and additives[1] contained in cargo hold wash water	**Discharge permitted** ≥12 nm from the nearest land, en route, as far as practicable and subject to two additional conditions[5]	**Discharge prohibited**
Cleaning agents and additives[1] in deck and external surfaces wash water	**Discharge permitted**	**Discharge prohibited**
Carcasses of animals carried on board as cargo and which died during the voyage	**Discharge prohibited**	**Discharge prohibited**
All other garbage including plastics, synthetic ropes, fishing gear, plastic garbage bags, incinerator ashes, clinkers, cooking oil, floating dunnage, lining and packing materials, paper, rags, glass, metal, bottles, crockery and similar refuse	**Discharge prohibited**	**Discharge prohibited**
Mixed garbage	When garbage is mixed with or contaminated by other substances prohibited from discharge or having different discharge requirements, the more stringent requirements shall apply	

[4] These substances must not be harmful to the marine environment.

[5] According to regulation 6.1.2 of MARPOL Annex V the discharge shall only be allowed if: (a) both the port of departure and the next port of destination are within the special area and the ship will not transit outside the special area between these ports (regulation 6.1.2.2); and (b) if no adequate reception facilities are available at those ports (regulation 6.1.2.3).

Appendix VI.

MARPOL Annex VI - Air Emissions – Mediterranean Sea is not a SECA / ECA

Vessel	Sub-Category	Discharge Conditions
All vessels	Ozone-depleting substances	• Prohibited
	Nitrogen Oxides	• Operation of diesel engines >130kW prohibited unless engine is certified to meet prescribed emission standards. New Engines: • Tier I - 17 g/kW from 1 January 2000 • Tier II - 14.4 g/kW from 1 January 2011 • Tier III - 3.4 g/kW from 1 January 2016 (in Emission Control Areas (ECA)) Existing Engines (installed on ship on or between 1 January 1990 to 1 January 2000) • 17g/kW for diesel engine with power output >5000kW and displacement per cylinder ≥ 90 litres • Approved method by Administration
	Sulphur Oxides	• Sulphur content of fuel oil not to exceed 4.5%.** • From 1 January 2012, sulphur content of fuel oil not to exceed 3.5% ** • From 1 January 2020 sulphur content if fuel oil not to exceed 0.5% ** ** Fuel oil to be purchased from a registered supplier Note a feasibility review to be completed 2018
	Incinerators	• Incinerators installed after 1 January 2000 must be type approved and certified to meet prescribed emission standards. • Do not use within port limits

Appendix VII.

International Convention on the Control of Harmful Anti-Fouling Systems on Ships, 2001 (AFS 2001)

Art 4 prohibits the use of harmful anti-fouling systems listed in Annex 1 (exemptions for a certain period of time possible)

Anti-fouling system	Control measures	Application	Effective date
Organotin compounds which act as biocides in anti-fouling systems	Ships shall not apply or re-apply such compounds	All ships	1 January 2003
Organotin compounds which act as biocides in anti-fouling systems	Ships either: (1) shall not bear such compounds on their hulls or external parts or surfaces; or (2) shall bear a coating that forms a barrier to such compounds leaching from the underlying non-complaint anti-fouling systems	All ships (except fixed and floating platforms, FSUs and FPSOs that have been constructed prior to 1 January 2003 and that have not been in dry-dock on or after 1 January 2003):	1 January 2008