Regional Marine Pollution Emergency Information and Training Center

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High volume of cargo, container, passenger vessel traffic.

- 351 Ports in the WCR
- 16 Oil Refineries
- 51 Tanker terminals
- More than 15 different types of ships transiting

http://cep.unep.org/racrempeitc/maritime-traffic
Legal structure

Contracting Parties must adopt measures aimed at preventing, reducing & controlling:

» pollution from ships

» pollution caused by dumping

» pollution from sea-bed activities

» airborne pollution

» pollution from land-based sources & activities
Works in support of:

International Maritime Organization (IMO) &
United Nations Environmental Program (UNEP)

- Convention on Biological Diversity (CBD),
- RAMSAR Convention on Wetlands
- CITES Convention on trade in endangered species,
- Stockholm Convention on chemicals management
- Basel Convention on hazardous waste
- Oil Pollution Preparedness Response & Cooperation (OPRC)
- MARPOL
- Ballast Water Management
- London Conventions.
Countries included in the Cartagena Convention

Antigua and Barbuda, Bahamas, Barbados, Belize, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, El Salvador, France, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Kingdom of the Netherlands, Nicaragua, Panama, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, United Kingdom, United States of America and Venezuela
Small Island Developing States (SIDS)

Wider Caribbean: 23 of 52 recognized by UN.

16 U.N. Members
- Antigua and Barbuda, Bahamas, Barbados, Belize, Cuba, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and Grenadines, Trinidad and Tobago, and Suriname

7 non-Member or Associate of Regional Commissions
- Anguilla, Aruba, British Virgin Islands, Montserrat, Netherlands Antilles, Puerto Rico & the U.S. Virgin Islands
Collaboration of Governments, UNEP & IMO
Within framework of U.N Environment Program - Regional Coordinating Unit for the Caribbean Environment Program
Mission:

➢ To assist states and territories of the Wider Caribbean Region to develop sustainable national and regional capabilities to implement international standards to prevent and respond to threats to the marine environment from shipping.
Cartagena Convention and Oil Spills Protocol

OPRC 1990

2000 OPRC Hazardous and Noxious Substances Protocol

Civil Liability and Fund Conventions

MARPOL Convention

Anti-fouling Systems Convention

Ballast Water Management Convention

And other relevant legal instruments
RAC/REMPEITC- Caribe Activities (2005-2016)

254 Meetings/Workshops
Over 1,500 attendants
Activities Attended/Hosted by Countries (2005-2014)
Convention Ratification

- 2008/2009 Biennium
- 2010/2011 Biennium
- 2012/2013 Biennium
- 2014/2015 Biennium

% of the States and Territories of the WCR

- Assigned National Authority
- NCP (approved or draft)
- CARTAGENA CONVENTION & Oil Spill Protocol
- MARPOL 73/78 (Annex I/II)
- MARPOL 73/78 (Annex III)
- MARPOL 73/78 (Annex IV)
- MARPOL Protocol 97 (Annex VII)
- CLC Protocol 92
- FUND Protocol 92
- FUND Protocol 2003
- OPRC Convention 90
- OPRC/HNS 2000

Graph shows trends and comparisons over different bienniums.
More than Training & Technical Assistance!

- Represents the WCR at Regional & International forums (IOSC, MEPC, PPR, SMA, IGM)
- Secretariat of OPRC Plan, MTOP, BWM Task Force
- Shares understanding of implementation challenges unique to the WCR
- Voices concerns, raises attention and brokers support for the WCR
- Facilitates partnerships & communication within the WCR
- Provides IMO trusted regional stakeholders

More than Training & Technical Assistance!
$ 5.5M World Bank Project - Global Environment Trust Fund Grant Agreement

To provide **technical & legal components** of a **regional strategy** for the **ratification of MARPOL 73/78** by **22 Developing Countries** of the Wider Caribbean Region (DCWCR).

- information on the **legal, technical & institutional measures** required
- **forum for reaching a regional consensus on actions to be taken**

First World Bank:
- MARPOL Project
- Project with IMO
- Project with all **22 developing countries** of the Wider Caribbean Region.

Lessons learned included:
- **IMO had no regional office assigned to the project**;
- **No suitable institution existed** which embraced all countries involved
- The **Bank should continue to support** the efforts of IMO & governments to **implement & sustain** MARPOL 73/78 in the Wider Caribbean Region
For over 20 years, RAC/REMPEITC-Caribe, in association with IMO, & UNEP CAR/RCU, have regularly conducted regional & national workshops on MARPOL since 2007, RAC/REMPEITC has conducted or participated in 13 regional or national MARPOL-related workshops with more than 350 participants:

- To provide capacity building & facilitate the exchange of information among the WCR on legislative, administrative & operating procedures regarding MARPOL.
Outreach Program to Facilitate the Implementation of MARPOL Annex V (2007-2008)

• RAC/REMPEITC-Caribe, IMO & UNEP Outreach

• Followed by series of seminars in 7 countries:
  – hosted by Land-based Sources of Pollution (LBS) Protocol of the Cartagena Convention

• In 2011 the **Wider Caribbean Region** became a designated **Special Area under Annex V** of the MARPOL Convention which prohibits the discharge of all garbage by ship. RESOLUTION MEPC.191(60
Regional Workshop on Ratification, Implementation, & Enforcement of the MARPOL Convention (Suriname, 16-18 Oct 2012)

Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago.
Impediments to the Implementation and Enforcement of MARPOL

- Financial/ Lack of funding
- Politics - National/Sector priorities
- Lack of Legal drafters and Maritime Experts
- Maritime Governance and Legislation
- Lack of Public Knowledge
- Lack of practical information about MARPOL
- International representation
Lack of appropriate infrastructures to manage waste in a sustainable manner. Waste management is already a challenge for many islands where the most common practice is landfill disposal.

Common fear that taking additional waste from ships will aggravate the situation as it will overfill the landfill.

Concern about the potential introduction of harmful pests/organisms represents a threat to the local agriculture sector.
  - many restrictions on garbage (annex V)
  - In most cases, organic waste is not accepted or subject to inspection/quarantine.

Absence of recycling sector for plastics
  - many islands do not accept
Ideas to Increase the Availability of Port Reception Facilities & next steps

- Develop agreements with local oil companies and refinery for the handling of oily waste (Annex I)

- Consider the designation or the WCR as a Special Area under Annex I

- View waste as a resource - Explore possible ways to reuse/recycle waste - waste to energy options, composting etc.

- Set up modern waste management infrastructures, not only for ship generated waste but for the benefit of the island itself.

- Development of a Regional Master Plan based on the density of the maritime traffic and the estimation of waste type and quantity that needs to be handled.
Recommendations from the 2012 Regional Workshop

• Organize additional national workshops to address common shortfalls & facilitate solutions/strategies to adhere to the requirements of implementation of reception facilities.

• Provide practical information about the implementation of MARPOL.
  • Difficult to follow up with the frequent amendments
  • Lack of practical information. (waste management options, costs etc.).

• Encourage regional cooperation in the consistent implementation & enforcement of the MARPOL Convention through annual meetings using REMPEITC to coordinate.
Recommendations from the 2012 Regional Workshop

• Continue to follow-up & track progress of data input into the GISIS database regarding the adequacy of their reception facilities with a possibility of developing a regional reporting system.

• Privatization and/or Public/Private Partnerships models
  • Possible most practical way of implementing infrastructure
  • Skilled personnel and subject matter expertise.
  • Resources strained regionally.
  • Provide instant financial support /industrial knowledge
  • Proven successful strategies
  • Traditional monies from development banks or financial grants from the EU or the US have proven to be wasteful.
March 2012, IMO MEPC 63:

- Adopted amendments to MARPOL Annexes I, II, IV, V and VI
- Small Island Developing States (SIDS) may satisfy the relevant requirements of reception facilities through regional arrangements in accordance with IMO Guidelines
- MEPC.221(63): Guidelines for the Development of a Regional Reception Facilities Plan

The idea of a “Regional Master Plan” for the implementation of reception facilities such as garbage, sewage, oil & chemical reception facilities was proposed at the 2012 workshop.

Recommended that the concept be studied further:
- comprehensive study to evaluate regional resources, capacity to implement and logistical capabilities.
- estimate the quantity and type of waste that needs to be handles in the region
Regional workshop on MARPOL & Port Reception Facilities
(Fort Lauderdale, 22-25 July 2013)

Antigua & Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, St Kitts & Nevis, St Lucia, St Vincent & the Grenadines, Suriname, Trinidad & Tobago
Findings from the 2013 Regional MARPOL Workshop

- Only a few countries accepting oily waste
- Very few accepted sewage.
- Most excepted garbage but had many restrictions
- Most common restrictions
  - organic material
  - biomedical waste
  - batteries & fluorescent tubes.
- Information in GSIS regarding PRFs often outdated/incomplete
Legal Framework

Many trying to have framework approved, or were reviewing theirs, to incorporate the new MARPOL amendments.

Advance notification form and waste segregation

Most countries require 24h - 48h advance notification

Different forms used between countries -> not IMO template.

Reception Cost to Ships:

The price system for ship-generated waste disposal varies widely within the region.

- $ per weight / $ per volume / $ per container (truckload, bin ...) / + a fee per transaction
Findings from the 2013 Regional MARPOL Workshop

- Lack of PRFs directly linked to **incapacity** of islands to **deal with land generated waste**
  - Need to address general issue of waste management
  - Involve all stakeholders (maritime admins & industry).

- Very **few waste treatment facilities** available.

- Majority have open dumps

- Some have sanitary landfills.

- Few equipped with:
  - incinerators;
  - waste recycling plants; or
  - cooking oil recycling plants.

- Recycled oily waste used:
  - as a source for energy to fire the boilers of a rum distillery,
  - furnaces of a plant; or
  - as a road surfacing material.
Recommendations from the 2013 Regional MARPOL Workshop

1. Continue to follow-up with progress of
   - data input into the GISIS database
   - adequacy of reception facilities
   - standardization of the advance notification form.
   - working groups regarding the development of the questionnaires and data gathering.

2. Maintain annual meetings, using REMPEITC in order to:
   - encourage regional cooperation
   - continue discussion regarding PRF regional arrangements
   - disseminate information on amendments to MARPOL

3. Continue to foster the cooperation between shipping industry and the maritime administrations.
5. Provide additional information regarding waste treatment technologies suitable for the Caribbean region.

6. Engage in discussions with the Secretariat of the Basel Convention regarding transboundary movement of waste:
   - implications of prior informed consent requirement under the Basel Convention for regional arrangements.

7. Seek potential areas of cooperation with the various organizations represented at the workshop as well as other regional organizations involved in the issue of waste management.

8. Present the findings of the activity to the next steering committee of RAC/REMPEITC and assess the aspiration of the region to further look into the feasibility of regional arrangements for PRFs.
Dutch Caribbean Port Reception Facilities Workshop (Aruba, 26 May, 2015)

Organized by Netherlands Dept of Infrastructure & Environment

To: Exchange knowledge & experiences on PRF development & to explore chances for improvement on island and regional scale.

Sint Maarten, Curacao, Aruba, Sint Eustatius, Bonaire & Saba
Findings from the 2015 Sub-regional Workshop in Aruba

• “Even island territories of developed nations in the Caribbean are still unable to meet the Port Reception Facility requirements of the various annexes of MARPOL.”

• Curacao, Bonaire, and St Martin
  – PRFs to meet obligations of some of the annexes

• Saba and St Eustatius
  – no capacity

• None can meet all of their obligations under MARPOL

• Information regarding PRFs appeared to be outdated & inaccurate.

• Continued & keen interest in the concept of a Regional Reception Facility Plan for the Wider Caribbean.
• Collaborate efforts of with UNEP (Land Based Sources) in identifying
  – main Stakeholders
  – potential Regional PRFs
  – infrastructure improvements
  – ongoing or past activities funded by UNEP CEP or other UN organizations on LBS

• Review shipping patterns in WCR with help of the Netherlands Directorate of Maritime Affairs

• Take recommendations of this meeting & RAC/REMPEITC’s previous activities to start the development of a regional plan
• Shipping industry needed to be present
• Concept of consolidating waste among islands to make economic volume
• Can create shipping line to collect waste but will it be profitable.
• Look at using the model of Rotterdam
• Need to explore regulatory issues first
Regional Workshop on Port Reception Facilities & Waste Management
(Trinidad and Tobago 04 - 06 Oct, 2016)

Antigua, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent, Suriname, Trinidad and Tobago.
• None of participant SIDS are currently fully equipped to handle all categories of SGW

• Distinction between those that have reasonable potential to develop capacity & those that don’t.

• Widely absent:
  – Legislation implementing MARPOL & regulating reception/disposal of SGW
  – Waste management plans that identify processes, procedures & best practices for reception, transportation final disposal of SGW
Reported Cases of Alleged Inadequacies in the WCR

53 Reported Inadequacies in 24/36 States and Territories
Waste Categories for Alleged Inadequacies in the WCR

- 42 inadequacies for Annex I
- 1 inadequacy for Annex II
- 3 inadequacies for Annex IV
- 40 inadequacies for Annex V
- 4 inadequacies for Annex VI
<table>
<thead>
<tr>
<th>Type of Waste</th>
<th>Antigua and Barbuda</th>
<th>Barbados</th>
<th>Belize</th>
<th>Dominica</th>
<th>Grenada</th>
<th>Jamaica</th>
<th>St. Vincent and the Grenadines</th>
<th>St. Kitts and Nevis</th>
<th>St. Lucia</th>
<th>Suriname</th>
<th>Trinidad and Tobago</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annex I - engine room</td>
<td>Yes¹</td>
<td>Yes⁶</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes¹⁰</td>
<td>No</td>
<td>No</td>
<td>Yes¹⁸</td>
<td>No</td>
<td>Yes²¹</td>
</tr>
<tr>
<td>Annex I - cargo residues</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes¹⁰</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Annex II</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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</tr>
<tr>
<td>Annex IV</td>
<td>No</td>
<td>Yes⁷</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes¹⁶</td>
<td>No</td>
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</tr>
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<td>Annex V - Garbage other than cargo residues</td>
<td>Yes⁸</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes¹¹</td>
<td>Yes¹⁷</td>
<td>No</td>
<td>Yes²⁰</td>
<td>Yes²¹</td>
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<td>No</td>
</tr>
<tr>
<td>A Plastics</td>
<td>Yes²</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes⁹</td>
<td>Yes¹²</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes²⁰</td>
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</tr>
<tr>
<td>B Food wastes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No³¹</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes²⁰</td>
<td>No</td>
</tr>
<tr>
<td>C Domestic Wastes</td>
<td>Yes³</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes⁹</td>
<td>Yes¹⁴</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes¹⁹</td>
<td>Yes¹⁹</td>
<td>No²⁰</td>
</tr>
<tr>
<td>D Cooking Oil</td>
<td>Yes⁴</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes¹⁴</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes¹⁹</td>
<td>No²⁰</td>
<td>No</td>
</tr>
<tr>
<td>E Incinerator ashes</td>
<td>Yes⁵</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes⁹</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes¹⁹</td>
<td>Yes¹⁹</td>
<td>No²⁰</td>
</tr>
<tr>
<td>F Operational wastes</td>
<td>Yes⁵</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes¹⁴</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes¹⁹</td>
<td>Yes¹⁹</td>
<td>No²⁰</td>
</tr>
<tr>
<td>Annex V - cargo residues</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes¹⁴</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Annex VI</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>n/a</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
• Develop national legislation & guidelines pertaining to Ship Generated Waste (SGW)

• Development waste management plans, guidelines & regulations for reception, management & disposal of SGW

• Consider harmonization requirements & common structures for:
  – reception facilities requirements, fees, notification/reporting & penalties.

• Explore partnerships
Recommendations from the 2016 PRF & Waste Management Workshop

- Consider SGW with **domestic waste**.
- **Study** storage/treatment **onboard different** ships.
- **Disseminate best practices** on shipboard management.
- Conduct **next steps** for a **Regional Reception Facility Plan**
  - *Guidelines for the Development of a Regional Reception Facilities Plan (Resolution MEPC.221(63))*
  - For development of **Regional Arrangement proposals**.
- **Brief to Senior Maritime Administrators**
- **Establishment of a correspondence group**
2017: Presented Recommendations from Oct 2016 Workshop at:

• Regional Workshop for Senior Maritime Administrators
  – Barbados, 7 to 8 February 2017

• 17th Intergovernmental Meeting on the Action Plan for the Caribbean Environment Programme & 14th Meeting of the Contracting Parties to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena Convention)
  – French Guiana, 15-17 March 2017

Wording in both resolutions:

“Conduct [with the support and coordination of RAC/REMPIETC-Caribe] a feasibility study on the development of a Regional Port Reception Facilities Plan (RPRFP) for the Wider Caribbean Region”
Proposal:
- Submitted to IMO by RAC/REMPEITC-Caribe in Oct 2016,
- Partially funded by Norway

To Be Conducted in 2017:
- By RAC/REMPEITC-Carib & stakeholders
- For SIDS of the WCR

Objective:
- **To complement other strategies** for improving management of ship generated wastes & cargo residues within the WCR
- **Contribute to efforts** which **improve the ability** of the Caribbean States **to effectively fulfill their obligations** under MARPOL, or to accede to MARPOL where a State is not already a Party
Create teams to assist

Utilize:

- stakeholder lists/data received from Oct 2016 workshop vessel movement data
- Guidelines for the Development of a Regional Reception Facilities Plan; and other information on What constitutes adequate facilities and How adequacy can be assessed.

Develop survey from IMO MARPOL Pubs/Documents

Coordinate with Focal Points to visit ports in **16 SIDS:** Antigua and Barbuda, Bahamas, Barbados, Belize, Cuba, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and Grenadines, and Trinidad and Tobago, Suriname
Port Assessment:

- Type & available facilities
- Identify opportunities to provide adequate port reception facilities, where such facilities are not already available.

Demand/Needs Assessment:

- current & projected future demand by ships for PRFs in the region & individual ports
- requests for various types of SGW & cargo residues
Feasibility Study:
Expected Outcomes

- **Identify & quantify:**
  - types of ships operating in the Region
  - types of waste & cargo residues

- Describe **voyage patterns** of ships calling:
  - take into account routes & ports of calls,
  - Include origin & destination outside the region
  - so ships do not need to deviate route

- Describe **aspects of routing & voyage planning**
  - that may affect amount of SGW & cargo residues on board ships arriving; and/or
  - need to clear ship generated wastes & cargo residues storage spaces prior to the onward journey.

- Describe other relevant **additional considerations** that may influence **PRF demand** in the region or particular ports.
Identify:

- ports that could be candidates for Regional Ships Waste Reception Centres (RSWRC)
- ports with limited facilities (PLF)
- any potential options suited to the vessels calling at ports within the Region that will not encourage any illegal discharge into the sea.

Develop/refine a list of all stakeholder roles and responsibilities for implementing or operating PRFs
Additional WCR assessments:

– Should be conducted on non-U.N. Member SIDS
  - with a view of identifying all possible measures for tackling inadequacy of PRFs in the WCR.

– Align with other assessments:
  - COCOTRAM / U.S. funded for Latin America ports
  - Kingdom of the Netherlands
  - Others? (UNEP LBS)

Could RAC/REMPEITC-Caribe be the:

– **Central point of contact** for a proposed Caribbean Regional Reception Facility Plan;

– **Regional system**, based within the Caribbean, for handling formal reports of alleged inadequate port reception facilities?
Capacity Building for:

- National Legislation and Implementation
- Waste Management Plans
- Waste recycle, reuse and disposal options
- National/Local Partnerships

Develop /Formalize:

Regional Partnerships
A Regional Strategic Plan
Harnessing Support/Partnerships Through RAC/REMPEITC-Caribe

WCR Commercial Sector
- Oil & Gas
- Shipping
- Tourism
- NGOs

Developing States of WCR:
- 16 SIDs
- 8 Latin & South American
- NGOs

Developed Nations of WCR:
- USA, NZ, FR, UK
- NGOs
- Other from Outside
Boats  Loans
Workshops  Exercises
Grants  Technical Assistance
National  Engineering
Funding
Conferences
Bilateral  Training  Equipment
Capacity Building
Outreach  Regional
Using a Strategic Plan
Regional Marine Pollution Emergency Information and Training Center

- Hosted by the Government of Curaçao

- Staffed with subject matter experts voluntarily seconded by States signatory to the Cartagena Convention.
From the Caribbean:
- Oil and Gas Sector
- Shipping
- Tourism