

Islamic Republic of Iran, Department of Environment (DOE)

Stocktaking of Existing Activities and Actions to Reduce Marine Plastic Litter and Microplastics

Template for Country Updating (information-sharing)
for the Implementation Framework for Actions on Marine Plastic Litter

Policy framework

- ▶ **Waste Management Law (2004):** in order to protect the environment from harmful effects of waste materials. The Waste Management Law contains 23 articles with 9 paragraphs.
- ▶ **Waste Management bylaw (2005):** The Waste Management Law supplemented by an executive bylaw that contains specific provisions for the various types of waste in respect to waste avoidance, reduction, recycling, and disposal as well as collection and transport.
- ▶ **The Law of taking taxes for productions that causes creation of dangerous materials:** Recently established in 2019, contains 6 articles.
- ▶ **Draft of “Guideline for reducing plastic consumption in the country”.**
- ▶ **Guideline for environmental aspects in packaging, distribution and consumption of mineral plaster and cement products.**
- ▶ **Guideline for use of biodegradable plastics.**

Related Conventions/Protocols, Action plan and Project

- ▶ Protocol for the protection of the Caspian Sea against pollution from land-based sources and activities to the framework Convention for the protection of the marine environment of the Caspian Sea (Tehran Convention) is signed in 2011 but it is not entered into force yet.
- ▶ Protocol for the Protection of the Marine Environment against Pollution from Land-Based Sources(1990) to the Kuwait Regional Convention for Co-Operation of the Marine Environment from Pollution(1978).
- ▶ Convention on the Transboundary Movement of Hazardous Wastes and their Disposal (Basel Convention).
- ▶ London Protocol on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter.
- ▶ Annex V of MARPOL Convention .

Measures

► Prevention and reduction of plastic waste generation

A prohibition is imposed on the use of plastic water bottles in all the offices of DOE (headquarter and 31 provincial offices) across the country since mid-January 2018.

► Environmentally sound waste management and cleanup of marine plastic litter

a) Environmentally sound waste management:

- Promotion of Production and Consumption of goods with easy recycling and limitation on production and import of those with difficult Disposal and Recycling
- Improvement of Production using Recycled Material

b) Cleanup activities:

- Cleanup of the Caspian Sea, Oman Sea and Persian Gulf beaches in line with No Litter Plan
- Clean Beach activity for all of the coastal cities located in Hormozgan Province with the help of local communities and NGOs on regular basis usually last Friday of the year
- Cleanup the coastal areas of the Persian Gulf in collaboration with local communities and NGOs during Environmental Week
- Beach cleanup in Abu Musa Island, Hormoz Island and local communities and authorities
- Nationwide clean-up event during the "Clean Earth Week"

▶ **Promotion of innovative solutions**

- Support industries that produce recyclable disposable envelopes and containers

▶ **Multi-stakeholder involvement and awareness raising**

- Cleanup the coastal areas of Nayband Bay (Bushehr Province) in collaboration with Nayband Petrochemical Unit: Clean up Neyband beaches approximately 8.5 km twice a month. Including installation of special buckets in 5 existing parking lots and boards with themes related to enhancing general environmental culture.

▶ **Sharing scientific information and knowledge: R&D and Monitoring**

- (1) Assemblage of encrusting organisms on floating anthropogenic debris along the northern coast of the Persian Gulf (2019).
- (2) Survey of eighteen stations of the coast of Hormozgan province and a number of stations in the Larak, Faroor and Bani Faroor islands.

- (3) Investigation of micro rubbers, micro plastics and heavy metals in street dust: a study in Bushehr city, Iran (2017).
- (4) Microplastics in different tissues of fish and prawn from the Musa Estuary, Persian Gulf (2018).
- (5) Distribution and potential health impacts of micro plastics and micro rubbers in air and street dusts from Asaluyeh County, Iran (2019).
- (6) Microplastics and potentially toxic elements in coastal sediments of Iran's main oil terminal (Khark Island) (2017).
- (7) Geochemistry and environmental effects of potentially toxic elements, polycyclic aromatic hydrocarbons and micro plastics in coastal sediments of the Persian Gulf (2019).
- (8) Investigating a probable relationship between microplastics and potentially toxic elements in fish muscles from northeast of Persian Gulf (2018).
- (9) Microplastic pollution in deposited urban dust, Tehran metropolis, Iran (2017).
- (10) Neustonic microplastic pollution in the Persian Gulf (2020).
- (11) Monitoring of Hydrocarbon pollution (PAHs, Hopans, n- alkanes) in the Caspian Sea with emphasize on new methodologies (2019).

► Promotion of international cooperation

(1) Regional project “Addressing Marine litter in Caspian Sea Region”

(2) Draft of Regional Caspian Sea Marine Litter Action Plan as a part of above regional project.

(3) Risk Assessment Plan for Plastic Waste Accumulated Areas in the North Coasts of the Persian Gulf and Oman Sea (South Coast of the Country): Part of the Macroplastics Monitoring Master Plan, which is co-operating with Oman, India, the United Arab Emirates, Pakistan and Iran that Australia is head of project.

(4) Coastal Cleanup: Caspian Sea Day (12 August) 2019 in IRAN

Under the Caspian Sea (Tehran Convention), a project is defined to involve all the five Caspian states for providing a better understanding of marine litter in the Caspian Sea region on the national and regional level as well as to enable the sharing of best practices and information. The project is funded by the Coca-Cola Foundation and Global Water Challenge.

Area	No of Participants	Collected Litter (tons)
Mazandaran province	1480	41.3
Gilan Province	830	17.8
Golestan province	370	4.7
Total	2680	63.8

Best practices

► National level:

(1) Actions taken to reduce the usage of plastic material and replacement by environmental friendly material: Replacement of plastic bags with other environmental friendly products in product centers. Also, support industries that produce recyclable disposable envelopes and containers, and using the potential of women for making textile bags.

(2) Neustonic microplastic pollution in the Persian Gulf (2020), Alimehdiani *et al*, Marine Pollution Bulletin, Volume 150, January 2020: A comprehensive study on microplastics pollution in the surface waters of the Persian Gulf was done for the first time. Some of the results were shown below:

- Microplastics were found in all the stations.
- Fibers were the most abundance shapes of microplastics.
- The most common polymer types in the samples were polyethylene and polypropylene.
- The western part of the Persian Gulf polluted more than the eastern part.

► Local level:

-Clean Beach activity for all of the coastal cities located in Hormozgan Province with the help of local communities and NGOs on regular basis usually last Friday of the year

► Private sector:

-Cleanup the coastal areas of Nayband Bay (Bushehr Province) in collaboration with Nayband Petrochemical Unit: Clean up Neyband beaches approximately 8.5 km twice a month. Including installation of special buckets in 5 existing parking lots and boards with themes related to enhancing general environmental culture.

► International cooperation:

Project: Addressing Marine litter in the Caspian Sea region. Establishment of the regional network on marine litter

The project focuses on the following issues:

- ✓ The initial establishment of a regional network on marine litter consisting of five national networks.
- ✓ Creating an opportunity for the members of the network to participate in the training courses provided by the relevant international organizations in the field of marine litter.
- ✓ Leading a massive coastal clean-up campaign at the 2019 Caspian Sea Day using the regional network and
- ✓ Providing assistance and support to the preparation of a Caspian Sea Action Plan on marine litter.

Project outputs and activities:

- ✓ Establishment of a regional network on marine litter
- ✓ Ensuring the participation of network members in trainings
- ✓ Involvement of the members of the Network to participate in a massive coastal clean-up campaign at the 2019 Caspian Sea

Thank you for Your Attention

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