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Self - Monitoring and Reporting Regulations (SMART).

Outline



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What is the “Self- Monitoring and Reporting System”?

A comprehensive program aiming to enhance cooperation between EAD and facilities with discharges to the environment that might affect the environment.

What is needed to implement the “Self- Monitoring and Reporting Regulation”?

Regulatory Framework (Develop Regulations); and
Active Monitoring System (Implementation).



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What are the types of monitoring?



Monitoring Type	Advantages	Disadvantages
1. Inspection	Provide the most relevant and reliable information.	Can be very resource-intensive.
2. Monitoring Environmental Conditions Near a Facility	<ul style="list-style-type: none"> - Useful for detecting possible violations without entering the facility. 	<ul style="list-style-type: none"> - Can be difficult to demonstrate a connection between the pollution detected and a specific source. - Resource-intensive in areas of multiple sources.
3. Self-Monitoring, Self Recordkeeping, and Self- Reporting by the Regulated authority.	<ul style="list-style-type: none"> - Provide extensive information on compliance. - Shift economic burden of monitoring to the regulated community. - May increase level of management attention devoted to compliance within a facility. 	<ul style="list-style-type: none"> - Rely on integrity and capability of source to provide accurate data.
4- Citizen Monitoring	<ul style="list-style-type: none"> - Can detect violations that are not detected by inspections, industry self monitoring, and reporting. 	<ul style="list-style-type: none"> - Cannot control amount, frequency, or quality of information received. - Only a few violations are noticed by citizens.

Legal Authority and Policies

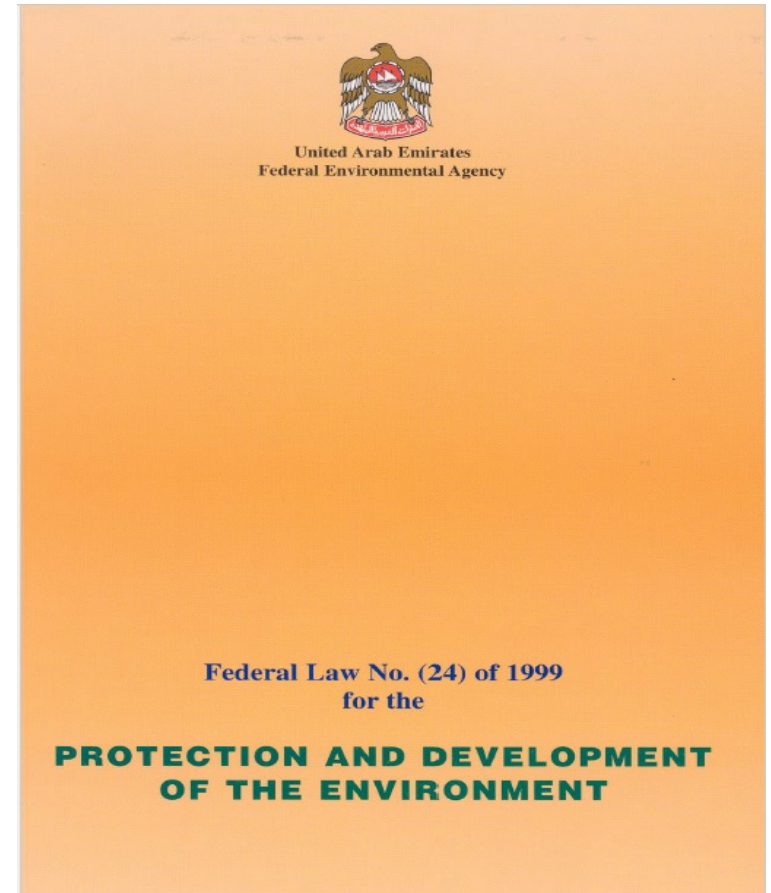
Legal Authority

- Federal Law No. 24 of 1999:
- Federal Cabinet of Ministers Decree No. (12) of 2006:
- Abu Dhabi Law No. (16) of 2005: Articles 1, 3(25) and 13

Policy

- UAE Vision 2021
- Abu Dhabi's Air Quality and Noise Strategy
- Abu Dhabi Environment Vision 2030:
- Abu Dhabi Plan

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What is the scope?

The scope of “ Self Environmental Monitoring and Reporting Regulation” is to build accurate, transparent, low cost system that enhance relation between EAD and activities that might have pressure on the environment through its discharges.

What are the phases of developing the regulations?

The development of the “Self Environmental Monitoring and Reporting Regulations” will be on three phases;

Phase one: Activities / Projects with discharges to Marine.

Phase two: Activities / Projects with emissions to the atmosphere.

Phase three: Activities / Projects with waste generated from its process.

How can (SMART) help EAD in its Priority Area?



- Water, Air and land:

A good understanding of sources of pollutants and quantities related to these sources, this can help in building mitigation scenarios for these pollutants.

- Biodiversity:

Link any influence of pollution or discharges to changes in the environment, so a preventive actions could be suggested for implementation based on these information.

- Environmental Information:

Data base will be active, accurate and up to date for sources of pollution and emissions and its related quantities, this will help in building a system that can generate reports easily.

- Policy and Regulation:

Help decision makers to take decisions supported by accurate data.

- Leader in Environmental Sustainability:

EAD will be leader in this area.

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What are the Expected outcomes?

The expected benefits for applying system “Self Environmental Monitoring and Reporting Regulation” are:

- 1- Commitments from activities to report on their discharges to the environment.
- 2- Better knowledge of the existing status.
- 3- Open discussion on mitigation options.
- 4- Help decision maker to take decisions based on a scientific bases.
- 5- Help the country to fulfil its commitments under certain agreements or conventions.

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How SMART going to be Implemented?



In order to establish such a system the following are needed:

1- Legal Framework.

A legal framework is needed to identify data to be reported, recurrent of reporting, data verification, report on accident, enforcementetc.

2- Technical capabilities within EAD.

In order to have this system operated, a good infrastructure is needed within EAD, including servers, laptops, softwareetc.

3- Market support.

An inventory for the monitoring devices available in the market, and how to let the market participate and help in the development of such a system.

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Steps

Public awareness.

Regulation drafting.

Stakeholder engagement.

Regulation interring into force.

EAD capacity building.

Implementation of the regulation, complianceetc.

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What does the draft regulation include?



Article (1): Definition.

Article (2): Purpose of the regulation.

Article (3): Area of implementation.

Article (4): discharges to marine.

Article (5): General reporting Data.

Article (6): Licensed entities to conduct environmental measurements, and reporting.

Article (7): Quality assurance and quality control for the self-reporting for discharges to the marine.

Article (8): Implementation schedule.

Article (9): General Requirements.

Article (10): Implementation.

Article (11): Incentives, penalties and fines.

Article (12): Entering into force.

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What does the Annexes include?



The Annexes describe types of facilities and activities to report under the proposed regulations. (such as)

- Fish farms.
- Steel and Aluminum Industry.
- Activities that use seawater for cooling purposes.
- Electricity, steam and air conditioning facilities.
- Water collection, treatment and delivery facilities.

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What Type of data to be reported?



The name of the standard	Unit of measurement	Periodic sampling	Methodology	Reference
Quantity of water used.	Cubic meters	Continuous	Flow meter	
Quantity of water returning to the sea.	Cubic meters	Continuous	Flow meter	
Water temperature of the sea (at the point of convergence).	Celsius	Continuous		
PH of sea water (at the point of convergence).	PH	Once a month	PH Meter	APHA 4500-H +B
Total dissolved solids	Milligram per liter	Once a month	Calculation from Conductivity	APHA 2510 B
Total suspended solids	Milligram per liter	Once a month	spectrophotometry	HACH method 8006

What about Incidences?



Date of Incident	A description of the accident and its causes	Action taken to address the impact of the accident	Corrective actions taken to prevent recurrence of the incident	The entities notified of the incident

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Thank you

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