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**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

HY/T 147.4-2013

**Code of practice for marine monitoring technology. Part 4:
Marine atmosphere
(English Translation)**

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Foreword

HY/T 147 "Marine Monitoring Technical Regulations" is divided into seven parts.

---Part 1: Sea water;

---Part 2: Sediment;

---Part 3: Organisms;

---Part 4: Ocean atmosphere;

---Part 5: Marine ecology;

---Part 6: Marine Hydrology, Meteorology and Sea Ice;

---Part 7: Satellite remote sensing technology methods.

This part is part 4 of HY/T 147.

This section was drafted in accordance with the rules given in GB/T 1.1-2009.

This part was proposed by the National Marine Environmental Monitoring Center.

This part is under the jurisdiction of the National Marine Standardization Technical Committee (SAC/TC283).

This section is responsible for the drafting unit. National Marine Environmental Monitoring Center.

Participating in the drafting of this section. South China Sea Environmental Monitoring Center of State Oceanic Administration, East China Sea Environmental Monitoring Center of State Oceanic Administration, State Oceanic Administration Beihai Environmental Monitoring Center.

1 Scope

This part of HY/T 147 specifies the analysis methods for monitoring items in marine atmospheric total suspended particulate matter samples and precipitation samples.

This section applies to the analysis and testing of atmospheric total suspended particulate matter samples and precipitation samples in coastal waters, offshore and open seas.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article. For undated references, the latest version (including all amendments) applies to this document.

GB/T 13580.2 Collection and storage of atmospheric precipitation samples GB/T 13580.3 Method for measuring the conductivity of atmospheric precipitation GB/T 13580.4 Electrode method for determination of pH value of atmospheric precipitation GB/T 13580.5 Determination of fluorine, chlorine, nitrite, nitrate and sulfate in atmospheric precipitation by ion chromatography GB/T 13580.7 Determination of nitrite in atmospheric precipitation N-(1-naphthyl)-ethylenediamine photometric method GB/T 13580.8 Determination of Nitrate in Atmospheric Precipitation GB/T 13580.11 Determination of ammonium salt in atmospheric precipitation GB/T 15432 Determination of Total Suspended Particulate Matter in Ambient Air Gravimetric Method GB 17378.1 Marine Monitoring Specification Part 1: General GB 17378.2 Marine Monitoring Specification Part 2: Data Processing and Analysis Quality Control

3 Terms and definitions

The following terms and definitions defined in GB 17378.1 and GB 17378.2 apply to this document.

Total suspended particulate; TSP the general term for particles suspended in the air with an aerodynamic equivalent diameter below 100µm, referred to as TSP.

Precipitation wetdeposition Liquid water and solid water falling into the underlying surface

(land, water surface, etc.) from the atmosphere, including rain, snow, hail, fog, etc.

Sample membrane A filter membrane containing total suspended particulate matter in the atmosphere.

4 General rules

4.1

The concentration of total suspended particulates is determined by the gravimetric method, see GB/T 15432.

4.2

The electrode method is used to determine the conductivity of precipitation, see GB/T 13580.3.