

**QUESTIONNAIRE FOR INDIGENISATION OF SEWAGE TREATMENT PLANT
FOR INDIAN NAVAL SHIPS**

1. Indicative list of standards/ regulations for Sewage Treatment Plant, are given in table below. Request confirm whether your design of Sewage Treatment Plant shall meet these regulations.

S.No	Standard/ Regulation	Description
(a)	MARPOL Annexure IV	Regulations for prevention of pollution by sewage by ships
(b)	IMO Resolution MEPC 115(51) and as amended from time to time	Regulation for the prevention of pollution by sewage from ships (Appendix 'A').
(c)	IMO Resolution MEPC 143(54), and 164(56) and as amended from time to time	Amendments to MEPC 115(51)
(d)	IMO Resolution MEPC 227(64) and as amended from time to time	Revised guidelines on implementation of effluent standards and performance tests for Sewage Treatment Plants (Appendix 'B').
(e)	IMO Part 3 of Resolution MEPC.107(49) and as amended from time to time	Specifications for Environmental Testing for Type Approval of Pollution Prevention Equipment
(f)	NCD 3930, Issue 3, Sep 16	STP, IVTS & fixed H ₂ S detection & alarm system

2. What are the different types of technology available for marine sewage treatment? Which technology is proposed to be adopted?

3. What is procedure for type testing in accordance with regulations for such systems?

4. Which inspection/ certification/ classification agency are you planning to approach?

5. What are the risks/ hazards during storage and treatment of sewage and what measures can be taken to safeguard against them?

6. What will be the various tests and inspections that would be undertaken towards certification of the marine sewage treatment plant to meet the relevant regulations?

7. What is the validity of type test of the marine sewage treatment plant?
8. What is the periodic checks of the output of the sewage treatment plant to be undertaken and what is the periodicity of these tests?
9. What is the firm's past experience in understanding and development of marine sewage treatment?
10. Capacity of plants that can be developed by the firm. (Capacity of sewage treatment plants for **IN** ships range from 6m³ to 50 m³ flow rate per day).
11. Estimated time period for development of prototype and subsequent production of the equipment?
12. Estimated cost for prototype development and final production of the equipment?

Vendor Information

13. Following details to be provided to ascertain capabilities of the firm:-
 - (a) Research capabilities, infrastructure, technology tie-up etc.
 - (b) Manufacturing capabilities, infrastructure, tie-up etc.
14. The following details to be provided (relevant documents to be forwarded):-
 - (a) Category of Industry (Large/Medium/Small Scale).
 - (b) Annual Turnover in INR for last 03 financial years.
 - (c) Profit/Loss Statement of the last 03 financial years.
 - (d) Number of employees in firm.
 - (e) Details of manufacturing infrastructure that would be useful for manufacturing the STP and its subsystems.
 - (f) Production capacity per annum.
 - (g) Details of major contracts executed in India & abroad:-

Contract Number	Contract Placement Authority	Equipment	Quantity	Cost

15. Any other detail/ information relevant to the project and credentials of the firm may be provided.

Note : Request provide responses for all questions in exhaustive detail.