

U. S. Department of Homeland Security

United States Coast Guard

Certificate of Approval

Coast Guard Approval Number: 159.015/10174/0

Expires: 21 June 2026

SEWAGE POLLUTION PREVENTION EQUIPMENT
CERTIFICATION OF COMPLIANCE WITH 33 CFR 159 - Type II Marine Sanitation Device

SEAHORSE MANUFACTURING P.O. Box 516 Lydia, LA 70569

Models: SHSTP 5500, 6000, 7000, 8000, 8500, and 10000

The models listed above have a designed hydraulic loading of 20.82, 22.71, 26.5, 30.28, 32.18, and 37.85 m3/day and an organic loading of 17.69, 21.32, 22.45, 24.49, 29.03, and 36.29 kg/day biochemical oxygen demand (BOD), respectively. The design shown on drawing SHSTP4001 have been examined and satisfactorily tested in accordance with IMO resolution MEPC.227(64) to meet the operational requirements referred to in regulation 9 of Annex IV of the International Convention for the Prevention of Pollution from Ships (MARPOL).

The tests on the equipment were carried out ashore at TEi-Testing Services, LLC on March 4, 2016. The equipment tested produced an effluent which did not exceed the geometric mean of 100 thermotolerant coliforms per 100 mL, total suspended solids of 35 Qe/Qi mg/L, a geometric mean of 5-day BOD without nitrification of no more than 25 Qi/Qe mg/l, a geometric mean of chemical oxygen demand (COD) of no more than 125 Qi/Qe mg/l, a pH between 6 and 8.5, a geometric mean of total nitrogen of no more than 20 Qi/Qe mg/l or at least 70 percent reduction, and a geometric mean of total phosphorus of no more than 1.0 Qi/Qe mg/l or at least 80 percent reduction.

The Administration is satisfied that the sewage treatment plant can operate at angles of inclination of 22.5 degrees in any plane from the normal operating position.

Details of tests and results obtained are shown on the Appendix to this Certificate.

This equipment does not meet the hazardous locations requirements specified on 46 CFR 111.105, and therefore may not be installed in hazardous locations on a U.S. flag vessel.

A copy of this certificate should be carried on board any ship equipped with the above described sewage treatment plant.

This certificate documents compliance with 33 CFR Part 159.

*** End ***

THIS IS TO CERTIFY THAT the above named manufacturer has submitted to the undersigned satisfactory evidence that the item specified herein complies with the applicable laws and regulations as outlined on the reverse side of this Certificate, and approval is hereby given. This approval shall be in effect until the expiration date hereon unless sooner canceled or suspended by proper authority.

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GIVEN UNDER MY HAND THIS 21st DAY OF JUNE 2021, AT WASHINGTON D.C.

S. M. PETERSON

Chief, Engineering Division

BY DIRECTION OF THE COMMANDANT



U. S. Department of Homeland Security

United States Coast Guard

Certificate of Approval

Coast Guard Approval Number: 159.015/10173/0

Expires: 21 June 2026

SEWAGE POLLUTION PREVENTION EQUIPMENT
CERTIFICATION OF COMPLIANCE WITH 33 CFR 159 - Type II Marine Sanitation Device

SEAHORSE MANUFACTURING P.O. Box 516 Lvdia, LA 70569

Models: SHSTP 1500, 2000, 2500, 3000, 3500, 4000, 4500, and 5000

The models listed above have a designed hydraulic loading of 5.68, 7.57, 9.46, 11.36, 13.25, 15.14, 17.03, and 18.93 m3/day and an organic loading of 5.26, 6.62, 8.16, 10.43, 11.61, 12.61, 14.70 and 15.97 kg/day biochemical oxygen demand (BOD), respectively. The design shown on drawings SHSTP2001, SHSTP3001 and SHSTP400 have been examined and satisfactorily tested in accordance with IMO resolution MEPC.227(64) to meet the operational requirements referred to in regulation 9 of Annex IV of the International Convention for the Prevention of Pollution from Ships (MARPOL).

The tests on the equipment were carried out ashore at TEi-Testing Services, LLC on March 4, 2016. The equipment tested produced an effluent which did not exceed the geometric mean of 100 thermotolerant coliforms per 100 mL, total suspended solids of 35 Qe/Qi mg/L, a geometric mean of 5-day BOD without nitrification of no more than 25 Qi/Qe mg/l, a geometric mean of chemical oxygen demand (COD) of no more than 125 Qi/Qe mg/l, a pH between 6 and 8.5, a geometric mean of total nitrogen of no more than 20 Qi/Qe mg/l or at least 70 percent reduction, and a geometric mean of total phosphorus of no more than 1.0 Qi/Qe mg/l or at least 80 percent reduction.

The Administration is satisfied that the sewage treatment plant can operate at angles of inclination of 22.5 degrees in any plane from the normal operating position.

Details of tests and results obtained are shown on the Appendix to this Certificate.

This equipment does not meet the hazardous locations requirements specified on 46 CFR 111.105, and therefore may not be installed in hazardous locations on a U.S. flag vessel.

A copy of this certificate should be carried on board any ship equipped with the above described sewage treatment plant.

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THIS IS TO CERTIFY THAT the above named manufacturer has submitted to the undersigned satisfactory evidence that the item specified herein complies with the applicable laws and regulations as outlined on the reverse side of this Certificate, and approval is hereby given. This approval shall be in effect until the expiration date hereon unless sooner canceled or suspended by proper authority.

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S. M. PETERSON

Chief, Engineering Division

BY DIRECTION OF THE COMMANDANT