



Commandant  
United States Coast Guard

2100 2<sup>nd</sup> Street, S.W.  
Washington, DC 20593-7355  
Staff Symbol: CG-5  
Phone: 1 (202) 372-1367  
Fax: 1 (202) 372-1925

COMDTPUB P16700.4  
NVIC 1-09  
JUNE 23, 2009

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 1-09

Subj: VOLUNTARY COMPLIANCE WITH INTERNATIONAL SEWAGE REGULATIONS IN ANNEX IV TO MARPOL 73/78

- Ref:
- (a) Regulations for Prevention of Pollution by Sewage from Ships, Annex IV to MARPOL 73/78, adopted by MEPC.115(51) on April 1, 2004.
  - (b) Effluent Standards and Performance Tests for Sewage Treatment Plants, adopted by MEPC.159(55) on October 13, 2006.
  - (c) Specifications for Environmental Testing for Type Approval of Pollution Prevention Equipment, Annex: Part 3, adopted by MEPC.107(49) on July 18, 2003.
  - (d) Standards for the Rate of Discharge of Untreated Sewage from Ships, adopted by MEPC.157(55) on October 13, 2006.
  - (e) Marine Sanitation Devices, 33 Code of Federal Regulations Part 159

1. PURPOSE. This circular establishes guidance for the owner or operator of any vessel as well as the manufacturer of any shipboard sewage processing equipment, including facilities that test shipboard sewage and related processing equipment, to voluntarily request U.S. Coast Guard certification of compliance with international sewage regulations in Annex IV to MARPOL 73/78. It also provides for reciprocity under Annex IV for non-U.S. flagged ships operating in waters subject to the jurisdiction of the United States.
2. ACTION. Area, district, and sector commanders, commanders of maintenance and logistics commands, Commander Deployable Operations Group, commanding officers of headquarters units, assistant commandants for directorates, Judge Advocate General, and special staff offices at Headquarters shall ensure that the provisions of this circular are followed. Internet release is authorized.

DISTRIBUTION – SDL No. 152

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
A																										
B	4	2	2										1													
C				2								1												2		
D											1*						1									
E				1									1	1		1										
F																										
G																										
H																										

NON-STANDARD DISTRIBUTION: D:1 ABS Americas, MARAD, MSC; Special Mailing List: CG-1, CG-10;

## NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 1-09

3. DIRECTIVES AFFECTED. The Navigation and Vessel Inspection Circular (NVIC) No. 9-82 (Change 1) on MSD Certification as well as Guidelines for Equivalent Compliance with MARPOL 73/78 Annex IV (sewage), MOC Policy Letter No. 03-03, are cancelled on January 1, 2010.
4. BACKGROUND.
  - a. The Marine Environment Protection Committee (MEPC) of the International Maritime Organization (IMO) recently revised MARPOL Annex IV resulting in several changes to the international regulations governing discharge of sewage from ships on international voyages. First, inspection criteria were enhanced to include initial surveys of installed sewage systems prior to being placed into service and periodic surveys throughout the life of the ship. Next, standards for discharging treated sewage into the water were made more stringent and equipment testing procedures were standardized. Finally, discharge rates for untreated sewage were established.
  - b. MARPOL Annex IV was implemented through a series of MEPC resolutions adopted over a two-year period.
    - (1) On April 1, 2004, resolution MEPC.115(51) in reference (a) adopted MARPOL Annex IV. It is applicable to new ships on international voyages with a keel laid date on or after September 27, 2003, or delivered on or after September 27, 2006, and existing ships after September 27, 2008, that are 400 gross tons and above or which are certified to carry more than 15 persons. The term *person* is defined by reference (a) to include both passengers and crew.
    - (2) On October 13, 2006, resolution MEPC.159(55) in reference (b) adopted the effluent standards and performance tests for MARPOL Annex IV. It is applicable to *sewage treatment plants* for ships with a keel laid date on or after January 1, 2010 and for ships having plants installed or delivered on or after January 1, 2010.<sup>1</sup> Ships with a keel laid date prior to January 1, 2010, or ships having *sewage treatment plants* installed or delivered prior to that date, may continue to use equipment certified to either the 1976 international effluent standards contained in resolution MEPC.2(VI) or an applicable national specification. Reference (b) also adopted environmental testing procedures from existing pollution prevention equipment regulations, which are contained in reference (c).
    - (3) On October 13, 2006, resolution MEPC.157(55) in reference (d) adopted the standard for maximum rate of discharge of untreated sewage in *holding tanks* at a distance equal to or greater than 12 nautical miles from the nearest land. It is applicable using the same dates as in subparagraph (1) above.
  - c. These revisions to MARPOL Annex IV effectively eliminate the prior equivalency that had existed between Type I and Type II marine sanitation device (MSD) requirements approved by the United States and *sewage treatment plant* requirements of MARPOL Annex IV. This creates a potential for adverse port State control action (e.g., detention) to be taken against U.S.

---

<sup>1</sup> From Unified Interpretation MEPC 56/23.

registered vessels engaged in international voyages with a keel laid date on or after January 1, 2010, or having a *sewage treatment plant* installed or delivered on or after January 1, 2010.

5. DISCUSSION.

- a. MARPOL Annex IV requires certain ships that engage in international voyages to have a valid International Sewage Pollution Prevention Certificate (ISPPC) issued by its flag Administration or by a recognized organization acting on behalf of the flag Administration. Under the provisions of Annex IV, an ISPPC cannot be issued to a ship unless its flag State is party to the annex.
- b. The United States is not party to MARPOL Annex IV. U.S. vessels that engage in international voyages with sewage systems in compliance with Annex IV may be eligible instead to receive a Statement of Voluntary Compliance (SOVC). This certificate takes the place of the ISPPC and is issued to a U.S. vessel by the U.S. Coast Guard or by an Authorized Classification Society (ACS), as appropriate, to demonstrate voluntary compliance with MARPOL Annex IV. The owner or operator of a U.S. vessel subject to requirements of MARPOL Annex IV, while not compelled to obtain a SOVC, may obtain one. Vessels without a valid ISPPC or SOVC on or after January 1, 2010, risk being detained overseas by a port State while operating in waters subject to its jurisdiction.
- c. MARPOL Annex IV prohibits discharge of sewage into the sea except when the ship has in operation an approved *sewage treatment plant*, or is discharging comminuted and disinfected sewage using an approved system at a distance of more than three nautical miles from the nearest land, or is discharging sewage which is not comminuted or disinfected at a distance of more than 12 nautical miles from the nearest land. The term *sewage* is defined by reference (a) to include drainage and other wastes from toilets and urinals, drainage from medical spaces including wash basins, wash tubs, and scuppers located in such spaces, drainage from spaces containing live animals, and other waste water when mixed with any of these drainages.
- d. Regulation 9 of MARPOL Annex IV recognizes three different classes of sewage systems.
  - (1) The first is a *sewage treatment plant*. This is a system approved by the flag Administration to comply with the standards and test methods established by the IMO. *Sewage treatment plants* continuously discharge their treated effluent so long as it is not within a special regulated area. In the United States, existing U.S. Coast Guard Type I and Type II MSDs most closely align as *sewage treatment plants* as they may discharge their treated sewage effluent directly into the waterway unless on a body of water where such discharges are otherwise prohibited (e.g., no discharge zones). The more stringent effluent requirements established for new installations of *sewage treatment plants* on or after January 1, 2010, or keel laid dates on or after that date, will invalidate the U.S. Coast Guard's existing equivalency arguments for Type I and Type II MSDs. For ships with approved Type I or Type II MSDs not undergoing installation of a new sewage system, such vessels may continue to use such devices as an Administration approved *sewage treatment plant*.

## NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 1-09

- (2) The second system recognized by Annex IV is a *sewage comminuting and disinfecting system with holding tank* approved by the flag Administration. This type of system must include a holding tank for the temporary storage of treated sewage when the ship is less than three nautical miles from land. Ships utilizing a comminuter system are prohibited from discharging treated sewage effluent within three nautical miles from land. Type II MSDs equipped with a storage tank align closely with this type of system. Beginning in 2010, U.S. Coast Guard certified Type II MSDs that are unable to meet the new effluent standards for a *sewage treatment plant* may still qualify as a *sewage comminuting and disinfecting system* provided it is equipped with a satisfactorily sized storage tank.
  - (3) The third type of system recognized by Annex IV is a *sewage holding tank* and this most closely aligns with the U.S. Coast Guard holding tank requirements for Type III MSDs.
- e. In the United States, a *sewage treatment plant* is referred to as a *marine sanitation device* and while both systems may perform similar functions the two terms are distinct in application. Use *sewage treatment plant* when referring to equipment under the international regulations contained in MARPOL Annex IV and use MSD when referring to equipment under the U.S. regulations contained in 33 CFR Part 159.
6. PROCEDURE. This circular establishes guidance for requesting U.S. Coast Guard certification of voluntary compliance with MARPOL Annex IV. These guidelines are divided into four distinct sections covering general applicability, testing facilities, equipment manufacturers, and the issuance of vessel certificates. Additionally, there is a section covering special circumstances.
- a. Applicability.
    - (1) MARPOL Annex IV is applicable to ships on international voyages that are:
      - (a)  $\geq 400\text{GT}$ ; or
      - (b)  $< 400\text{GT}$  certified to carry  $> 15$  persons, which includes both passengers and crew.
    - (2) The more stringent effluent standards and performance tests contained in resolution MEPC.159(55) are applicable to *sewage treatment plants* for ships with a keel laid date on or after January 1, 2010 and for ships having *sewage treatment plants* installed or delivered on or after January 1, 2010.<sup>2</sup>
    - (3) Ships with keel laid dates prior to January 1, 2010, or ships having *sewage treatment plants* installed or delivered prior to that date may continue to use equipment certified to either the 1976 international effluent standards contained in resolution MEPC.2(VI) or an applicable national specification. In the United States, this applicable national specification is 33 CFR Part 159.

---

<sup>2</sup> From Unified Interpretation MEPC 56/23.

- b. Testing Facility. Enclosure (1) contains guidance for testing facilities to be accepted by the U.S. Coast Guard as a *qualified facility* and includes the performance testing protocols for each type of sewage system.
  - c. Equipment Manufacturer. Enclosure (2) contains guidance for equipment manufacturers to request a Certificate of Approval from the U.S. Coast Guard.
  - d. Vessel Certificates. Enclosure (3) contains guidance for owners or operators of vessels that engage in international voyages to request a Statement of Voluntary Compliance with MARPOL Annex IV from the U.S. Coast Guard.
  - e. Special Circumstances. MARPOL Annex IV may be applicable to other vessels including small tugs, recreational boats, yachts, etc., that engage in international voyages. Regulation 4 in Annex IV requires a flag Administration to establish appropriate measures for vessels not specifically subject to international sewage regulations. In this case, for U.S. vessels and other vessels subject to the jurisdiction of the United States, appropriate measures are provided for under 33 CFR Part 159 in reference (e). U.S. vessels intending to engage on international voyages may apply for a SOVC using the procedures in enclosure (3).
  - f. Reconsideration. If a vessel owner, laboratory official, or manufacturer's representative does not agree with a U.S. Coast Guard decision directly related to any provision of this NVIC, a reconsideration of that decision may be submitted to the office responsible for implementing this guidance listed under Contact Information at the end of enclosures (1) through (3). The procedures in 46 CFR 1.03 may be followed when submitting a request for reconsideration.
7. DISCLAIMER. This guidance is not a substitute for applicable legal requirements, nor is it itself a rule. It is not intended to nor does it impose legally-binding requirements on any party. It represents the Coast Guard's current thinking on this topic and may assist industry, mariners, the general public, and the Coast Guard, as well as other federal and state regulators, in applying statutory and regulatory requirements. You can use an alternative approach for complying with these requirements if the approach satisfies the requirements of the applicable statutes and regulations. If you want to discuss an alternative approach (you are not required to do so), you may contact the office responsible for implementing this guidance listed under Contact Information at the end of enclosures (1) through (3).
8. CHANGES. This circular is available on the Web at <http://www.uscg.mil/hq/cg5/nvic/>. The Coast Guard will issue and post time sensitive amendments as an urgent change message on its Website for the benefit of the industry. Interested parties may suggest improvements to this circular by writing to the office responsible for implementing this guidance listed under Contact Information at the end of enclosures (1) through (3).
9. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS. Environmental considerations were examined in the development of this circular. While in many cases the equipping of vessels has no impact on the environment, in this case guidance on obtaining the certification of voluntary compliance with the provisions of MARPOL Annex IV is hoped to have a positive impact on the marine environment.

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 1-09

10. FORMS/REPORTS. The forms called for in this NVIC are available in USCG Electronic Forms on the Standard Workstation or on CG Central at <http://cgcentral.uscg.mil/> (Resources Tab) and Intranet at <http://cgweb.comdt.uscg.mil/CGForms>.



BRIAN M. SALERNO  
Rear Admiral, U. S. Coast Guard  
Assistant Commandant for Marine  
Safety, Security and Stewardship

- Enclosure: (1) Testing Facility Guidance  
(2) Equipment Manufacturer Guidance  
(3) Vessel Certificate Guidance  
(4) Sample Statements of Voluntary Compliance

## Testing Facility Guidance

### 1. U.S. TESTING FACILITY.

- a. Letter of Acceptance. Facilities in the United States that are in the business of independently evaluating, inspecting, and testing shipboard sewage systems and the effluent discharged from such systems for compliance with published standards may be eligible to receive a U.S. Coast Guard letter of acceptance as a *qualified facility* to evaluate, inspect, and test *sewage treatment plants* for compliance with MARPOL Annex IV.
- b. Application. A U.S. laboratory may, at its discretion, apply to the U.S. Coast Guard to be accepted as a *qualified facility*. Any laboratory previously accepted as a *recognized facility* under 33 CFR Part 159 may also apply to the U.S. Coast Guard for acceptance as a *qualified facility* under MARPOL Annex IV by using these application procedures. The application for acceptance should be made in writing, signed by the chief laboratory official, and include the location of each facility that will evaluate, inspect, and test shipboard sewage systems and the effluent discharged from such systems. Send the application to Commandant (CG-5213) using the address under Contact Information in paragraph 4 below and include the following:
  - (1) A detailed technical report that describes the rig, material, and equipment to be used at each facility, including, where applicable, the minimum and maximum operating limits for each piece of equipment to be used;
  - (2) A brief summary of the instrument calibration program at each facility, including, where applicable, the calibration status of each piece of equipment to be used;
  - (3) A brief summary of the relevant training, qualification, and experience for each person who performs, supervises, or witnesses a performance test;
  - (4) A statement affirming that neither the laboratory nor any sub-laboratory, including a subsidiary, is subject to any of the following:
    - (a) Owned or controlled by a supplier, vendor, or manufacturer of equipment or material to be evaluated, inspected, or tested;
    - (b) Dependent on the U.S. Coast Guard for acceptance to remain in business;
    - (c) Advertises or promotes the equipment or material to be evaluated, inspected, or tested;
  - (5) The name, title, address, and principal business activity of each laboratory officer and director as well as each person, company, or corporation that owns at least three percent interest in the laboratory or sub-laboratory, including a subsidiary, or in the company or corporation that controls the laboratory or sub-laboratory; and
  - (6) A statement that an official representative of the U.S. Coast Guard is allowed access to each facility to verify the information submitted in an application or to witness inspections, evaluations, and tests.

- c. Multiple Laboratories. A letter of acceptance may include one or more sub-laboratories also accepted by the U.S. Coast Guard to perform certain tests on behalf of the *qualified facility*. Under this special arrangement, multiple laboratories having discrete capabilities each perform a defined series of tests on the same device simulating installation onboard ship. The *qualified facility* provides for interfacility coordination and attends each procedure at the sub-laboratory to observe and validate results. Multiple day procedures may be attended selectively during critical periods, e.g., startup, maximum loading, final inspection, etc. For acceptance, the *qualified facility* submits a signed application together with a separate signed application from each sub-laboratory so that when viewed together the consolidated application not only covers all aspects of evaluation, inspection, and testing contained herein but also includes a brief description of how the various facilities will coordinate functions.
- d. Performance Testing Program. The performance testing program composes three discrete protocols, one for each type of sewage system having its own operational requirements and related discharge criteria. In addition, each of these three protocols comprises four phases that start with an evaluation of the manufacturer’s documentation and is followed by an inspection of the equipment design and construction, environmental (i.e., mechanical) testing, and finally analytical testing of the effluent.

(1) *Sewage Treatment Plant Protocol.* A *qualified facility* evaluates, inspects, and tests the manufacturer’s *sewage treatment plant* and effluent discharged from that system for compliance with MARPOL Annex IV using the protocol in paragraphs *a* through *d* below.

(a) Documentation evaluation. The laboratory performs an independent evaluation of the manufacturer’s documentation as it relates to manufacturing of the *sewage treatment plant* using each of the following standards:

<i>Standard</i>	<i>Title</i>
33 CFR 159.14(b)(1)	Quality control program
33 CFR 159.14(b)(2)	Design drawings
33 CFR 159.14(b)(3)	Instructions

(b) Design & construction inspection. The laboratory performs an independent inspection on the production model for which type approval is requested as well as on the material from which the system is constructed using each of the following standards:

<i>Standard</i>	<i>Title</i>
33 CFR 159.55	Identification label
33 CFR 159.57	Installation, operation, & maintenance instructions
33 CFR 159.59	Placard
33 CFR 159.61	Vents
33 CFR 159.63	Access to parts
33 CFR 159.65	Chemical level indicator
33 CFR 159.67	Electrical component rating
33 CFR 159.69	Motor ratings
33 CFR 159.71	Electrical controls & conductors

33 CFR 159.73	Conductors
33 CFR 159.75	Overcurrent protection
33 CFR 159.79	Terminals
33 CFR 159.81	Baffles
33 CFR 159.83	Level indicator
33 CFR 159.85	Sewage removal
Regulation 10, MEPC 115(51)	Standard discharge connections
33 CFR 159.89	Power interruption
33 CFR 159.93	Independent supporting
33 CFR 159.95	Safety
33 CFR 159.97	Safety, inspected vessel

- (c) Environmental tests. The laboratory performs independent environmental (i.e., mechanical) testing on the production model for which type approval is requested as well as on the material from which the system is constructed. All testing is performed on the same device installed either onboard ship or ashore, following the manufacturer's instructions. This testing is made using each of the following standards:

<i>Standard</i>	<i>Title</i>
Specification 3.2.2.1, MEPC.107(49) Annex	Vibration. Note: Liquid retention components, if any, filled with water to ½ volume.
33 CFR 159.105	Shock
33 CFR 159.107	Rolling
Specification 3.2.2.4, MEPC.107(49) Annex	Inclination
Specification 3.2.2.2, MEPC.107(49) Annex	Temperature range
Specification 3.2.2.3, MEPC.107(49) Annex	Humidity
33 CFR 159.117	Chemical resistance
33 CFR 159.119	Operability, temp. range
33 CFR 159.129	Ignition prevention
33 CFR 159.109	Pressure
33 CFR 159.111	Pressure & vacuum pulse

- (d) Analytical tests. The laboratory performs independent analytical testing on effluent discharged from the same device that underwent environmental testing. The laboratory specifies the testing method used along with all variable test conditions, such as quality of influent sewage, loading factors, sampling method, etc., and whether or not the effluent produced visible floating solids or caused discoloration of the surrounding water. This testing is made using each of the following standards:

<i>Standard</i>	<i>Title</i>
MEPC.159(55)	Thermotolerant coliform

MEPC.159(55)	Total suspended solids
MEPC.159(55)	Biochemical oxygen demand & chemical oxygen demand
MEPC.159(55)	pH
MEPC.159(55)	Residual chlorine
MEPC.159(55)	Zero or non-detected values

(2) *Sewage Comminuting and Disinfection System Protocol*. A *recognized facility*, as defined in reference (e), evaluates, inspects, and tests the manufacturer’s *sewage comminuting and disinfection system with holding tank* and the effluent discharged from that system for compliance with MARPOL Annex IV using the procedures for a USCG Type II certified device in 33 CFR Part 159.

(3) *Sewage Holding Tank Protocol*. A *recognized facility*, as defined in reference (e), evaluates, inspects, and tests the manufacturer’s *sewage holding tank* for compliance with MARPOL Annex IV using the procedures for a USCG Type III certified device in 33 CFR Part 159.

e. Certification of Results. The facility that performed the above evaluation, inspection, and testing on a given manufacturer’s system and the effluent discharged from that system certifies its test results are accurate and complete in a statement signed by the person in charge of testing. These results are part of a detailed technical report that is created by the *qualified facility* and includes a description of each evaluation, inspection, and test performed. The completed report is then forwarded, with all information submitted by the manufacturer, to the Marine Safety Center using the address under Contact Information in paragraph 6 of enclosure (2).

2. NON-U.S. TESTING FACILITY. Facilities located outside the United States that are in the business of independently evaluating, inspecting, and testing shipboard sewage systems and the effluent discharged from such systems for compliance with published standards may be eligible to receive a U.S. Coast Guard letter of acceptance as a *qualified facility* by using the same application procedures as described above for U.S. testing facilities.
3. LIST OF LABORATORIES. Any laboratory accepted by the U.S. Coast Guard is issued a letter of acceptance and entered into the Coast Guard Maritime Information Exchange (CGMIX), available on the Web at <http://cgmix.uscg.mil/>. This online searchable database is the official listing of all equipment and laboratories that have been accepted by the U.S. Coast Guard.
4. CONTACT INFORMATION. For more information on this section including acceptance of testing facilities, or to apply for acceptance, please contact:

COMMANDANT (CG-5213)  
 US COAST GUARD  
 ATTN SYSTEMS ENGINEERING DIVISION  
 2100 2ND ST SW STOP 7126  
 WASHINGTON DC 20593-7126  
 Phone: 1 (202) 372-1367  
 Fax: 1 (202) 372-1925

## Equipment Manufacturer Guidance

### 1. U.S. MANUFACTURER.

- a. Certificate of Approval. Shipboard sewage systems manufactured in the United States in compliance with MARPOL Annex IV may be certified by the U.S. Coast Guard Marine Safety Center (MSC). Type approval is annotated on the U.S. Coast Guard Certificate of Approval issued under 33 CFR Part 159. A copy of this certificate is provided by the U.S. manufacturer prior to shipboard installation and should be maintained onboard ship for as long as the system is installed.
- b. Application. A U.S. manufacturer may, at its discretion, apply to any facility accepted by the U.S. Coast Guard as a *qualified facility* to perform independent evaluation, inspection, and testing of a *sewage treatment plant* for compliance with MARPOL Annex IV. For *sewage comminuting and disinfection system with holding tank*, the manufacturer may apply to any facility accepted by the U.S. Coast Guard as a *recognized facility*, as defined in reference (e), for compliance with MARPOL Annex IV using the procedures for a USCG Type II certified device in 33 CFR Part 159. For *sewage holding tanks*, the manufacturer may apply to any facility accepted by the U.S. Coast Guard as either a *qualified facility* or a *recognized facility*, as defined in reference (e), for compliance with MARPOL Annex IV using the procedures for a USCG Type III certified device in 33 CFR Part 159. In all cases, the application for performance testing should be made in writing, signed by a representative of the manufacturer, and include the name and address of the applicant and the manufacturing plant. Send the application and one production model to the *qualified facility* or *recognized facility*, as appropriate, and include the following:
  - (1) The type and size of sewage system to be tested;
  - (2) The specific performance testing standard in enclosure (1) to be used;
  - (3) The sewage system design, including drawings, specifications, and other information that describes the materials, construction, and operation of the plant;
  - (4) The installation, operation, and maintenance instructions for the system;
  - (5) A complete description of the manufacturer's production quality control and inspection methods, record keeping systems that pertain to the manufacturer of the sewage system; and
  - (6) The name and location of the ship to which the sewage system will be installed, and whether testing should be performed either onboard the ship or ashore in the laboratory, or some combination of both.

- c. Certification. The U.S. Coast Guard MSC may issue a Certificate of Approval to a U.S. manufacturer for any of the following:
- (1) A *sewage treatment plant* may be certified by the U.S. Coast Guard MSC to meet the operational requirements in regulation 9.1.1 to MARPOL Annex IV if it is evaluated, inspected, and tested by a *qualified facility* using the *sewage treatment plant* protocol contained in enclosure (1) and produces effluent having no visible floating solids or discoloration on the surrounding water.
  - (2) A *sewage comminuting and disinfecting system with holding tank* may be certified by the U.S. Coast Guard MSC to meet the operational requirements in regulation 9.1.2 to MARPOL Annex IV if it is a USCG Type II certified device under 33 CFR Part 159 and is equipped with a holding tank suitable for temporary storage of treated sewage when the ship is less than three nautical miles from the nearest land. Under reference (a), this type of system produces treated sewage that is acceptable for discharge beyond three nautical miles from nearest land, except where otherwise prohibited, and can retain treated sewage in a holding tank when necessary. Stored treated sewage, as well as sewage from spaces containing living animals, may be discharged beyond three nautical miles from nearest land. Although reference (a) prohibits discharge of treated sewage from this type of system while the ship is operating internationally inside three nautical miles from nearest land, a certified USCG Type II device may, under the provisions of reference (e), discharge sewage inside three nautical miles while operating on waters subject to the jurisdiction of the United States, except where otherwise prohibited.
  - (3) A *sewage holding tank* may be considered certified by the U.S. Coast Guard MSC as meeting the operational requirements in regulation 9.1.3 to MARPOL Annex IV if it is a USCG Type III certified device under reference (e). Following a favorable review by a *recognized facility* or a *qualified facility*, the MSC may issue a letter indicating that the *sewage holding tank* has met the requirements of Regulation 9.1.3 in MARPOL Annex IV and 33 CFR Part 159. This type of system contains untreated sewage that is acceptable for discharge beyond 12 nautical miles from land, except where otherwise prohibited. Stored untreated sewage, as well as sewage from spaces containing living animals, may be discharged beyond 12 nautical miles from nearest land at a discharge rate using the calculations in reference (d). Although reference (a) prohibits discharge of sewage from this type of system while the ship is operating internationally inside 12 nautical miles from nearest land, a certified USCG Type III device may, under the provisions of reference (e), discharge sewage beyond three nautical miles while operating on waters subject to the jurisdiction of the United States, except where otherwise prohibited.
- d. Existing Equipment. A U.S. manufacturer may apply to any facility accepted by the U.S. Coast Guard as a *qualified facility* or as a *recognized facility*, as appropriate, to perform independent evaluation, inspection, and testing of any existing sewage system for compliance with MARPOL Annex IV by using the same application procedures as described above for U.S. manufacturers. The *qualified facility* or *recognized facility* follows the testing and reporting procedures applicable to that device. Installed systems may only be removed from a U.S. flagged vessel for purposes of certification by following the manufacturer's removal instructions. For inspected

vessels, prior written approval is needed from the local Officer in Charge, Marine Inspection (OCMI) before any installed systems may be removed. For vessels enrolled in the Alternate Compliance Program (ACP) prior written approval is obtained instead from the ship's Authorized Classification Society (ACS). In any case, all vessels remain subject to the requirements of treating or retaining sewage as provided for in reference (e) while operating in waters subject to the jurisdiction of the United States.

2. NON-U.S. MANUFACTURER. Shipboard sewage systems manufactured outside the United States in compliance with MARPOL Annex IV may be eligible for type approval by the U.S. Coast Guard MSC. A non-U.S. manufacturer may, at its discretion, apply to any facility accepted by the U.S. Coast Guard as a *qualified facility* or a *recognized facility*, as appropriate, to perform independent evaluation, inspection, and testing of a sewage system for compliance with Annex IV by using the same application procedures as described above for U.S. manufacturers. The *qualified facility* or *recognized facility* follows the testing and reporting procedures that are applicable for the given type of system. Type approval is annotated on the U.S. Coast Guard Certificate of Approval. A copy of the certificate is provided by the manufacturer prior to installation and should be maintained onboard the ship for as long as the system is installed.
3. RECIPROCITY. A shipboard sewage system having non-U.S. Coast Guard type approval may be eligible for type approval by the U.S. Coast Guard MSC. A manufacturer may apply to any facility accepted by the U.S. Coast Guard as a *qualified facility* or a *recognized facility*, as appropriate, to perform independent evaluation, inspection, and testing of sewage systems for compliance with MARPOL Annex IV by using the same application procedures as described above for U.S. manufacturers, being certain to include a copy of all prior test reports. The *qualified facility* or *recognized facility* follows the same testing and reporting procedures that are applicable for the given type of system and may, where appropriate, accept prior results having testing protocols that are substantially equivalent to those listed in the applicable protocol in enclosure (1). Type approval is annotated on the U.S. Coast Guard Certificate of Approval. A copy of the certificate is provided by the manufacturer prior to installation and should be maintained onboard the ship for as long as the system is installed.
4. SCALING. Only full-scale production quality *sewage treatment plants* may be accepted for evaluation, inspection, and testing under MARPOL Annex IV. Such plants are of the actual size and capacity to be installed onboard ships. However, a manufacturer may apply in writing to the U.S. Coast Guard MSC in Washington DC using the address under Contact Information in paragraph 6 below for a defined range of equipment sizes that employ the same design principles and technology using prior test results from a U.S. Coast Guard certified system.
5. LIST OF EQUIPMENT. Equipment certified by the U.S. Coast Guard MSC are issued a Certificate of Approval and entered into the Coast Guard Maritime Information Exchange (CGMIX), available on the Web at <http://cgmix.uscg.mil/>. This online searchable database is the official listing of all equipment and laboratories that have been accepted by the U.S. Coast Guard.

Enclosure (2) to NVIC No. 1-09

6. CONTACT INFORMATION. For more information on this section including equipment certification or design review, please contact:

COMMANDING OFFICER (MSC-2)  
US COAST GUARD  
ATTN MARINE SAFETY CENTER  
2100 2ND ST SW STOP 7102  
WASHINGTON DC 20593-7102  
Phone: 1 (202) 475-3402  
Fax: 1 (202) 475-3920

## Vessel Certificate Guidance

### 1. U.S. REGISTRY.

- a. Statement of Voluntary Compliance. Vessels registered in the United States that engage in international voyages with sewage systems in compliance with MARPOL Annex IV may be eligible to receive a Statement of Voluntary Compliance (SOVC). This certificate takes the place of the International Sewage Pollution Prevention Certificate (ISPPC) and is only issued to U.S. vessels to demonstrate compliance with MARPOL Annex IV. See enclosure (4) for sample SOVCs.
- b. Application. The owner or operator of a vessel registered in the United States with an installed and operational sewage system type approved by the U.S. Coast Guard may, at their discretion, apply for a SOVC for MARPOL Annex IV. The application for SOVC should be in writing, signed by the vessel owner or operator, and contain the name and address of the applicant. Send the application to the local Officer in Charge, Marine Inspection (OCMI), or to the Authorized Classification Society (ACS), as appropriate, and include the following:
  - (1) Vessel name and official number;
  - (2) Port of registry;
  - (3) Gross tonnage;
  - (4) Number of persons, including both passengers and crew, that the vessel is certified to carry;
  - (5) IMO Number, if any; and
  - (6) Copy of the U.S. Coast Guard Certificate of Approval indicating that the installed sewage system is one of the following approved types:
    - (a) A *sewage treatment plant* certified by the U.S. Coast Guard under the provisions of MEPC.159(55) to meet the operational requirements in regulation 9.1.1 to MARPOL Annex IV. Include a copy of the laboratory test results, which are attached to the U.S. Coast Guard Certificate of Approval.
    - (b) A *sewage comminuting and disinfecting system with holding tank* certified by the U.S. Coast Guard as a Type II MSD under the provisions of 33 CFR Part 159 to meet the operational requirements in regulation 9.1.2 to MARPOL Annex IV.
    - (c) A *sewage holding tank* certified by the U.S. Coast Guard as a Type III MSD under the provisions of 33 CFR Part 159 to meet the operational requirements in regulation 9.1.3 to MARPOL Annex IV. For holding tanks having no USCG Certificate of Approval, the vessel owner or operator may request a letter of certification from the MSC indicating that the holding tank meets the requirements of Regulation 9.1.3 in MARPOL Annex IV and 33 CFR 159.

- c. Survey. The cognizant OCMI or ACS, as appropriate, performs an examination of the vessel at any of the following:
- (1) Initial Survey. The vessel is subject to an initial examination before the ship is put into service or before the SOVC is issued for this first time. The purpose of this examination is to verify that the vessel's structure, equipment, systems, fittings, arrangement, and material of the installed sewage system are fully compliant with MARPOL Annex IV.
  - (2) Renewal Survey. The vessel is subject to a renewal examination before five years after the initial or last renewal survey. The purpose of this examination is to verify that the vessel's structure, equipment, systems, fittings, arrangement, and material of the installed sewage system are compliant with MARPOL Annex IV. If the renewal survey is completed within three months either before or after expiration of the certificate then the new expiration will be set ahead five years from the old expiration date, otherwise the new expiration will be reset to five years after the examination date.
  - (3) Additional Survey. The vessel is subject to additional examinations, either general or partial, according to the circumstances, whenever any important repairs or renewals have been made to the installed sewage system. The purpose of this examination is to verify that the necessary repairs or renewals have been effectively made, that the materials and workmanship of such repairs or renewals are satisfactory, and that the ship is compliant with MARPOL Annex IV.
- d. Issuance of Statement of Voluntary Compliance. The cognizant OCMI or ACS may issue or renew, as appropriate, a SOVC for MARPOL Annex IV to a U.S. vessel that is equipped with an installed and operational sewage system certified by the U.S. Coast Guard after successful onboard survey. Enclosure (4) contains sample SOVCs. Coast Guard Marine Inspectors may download an electronic version of the SOVC certificate, form CG-6047A, from the Coast Guard's electronic forms page. To complete the SOVC, refer to the enclosed samples and perform the following steps to the electronic document:
- (1) Fill in the vessel's particulars e.g., name, official number, etc., including the number of persons (i.e., passengers and crew) that the vessel is certified to carry. It is not necessary to include M/V before the name or D before the official number. Indicate the port of registry as *Falling Waters, WV*.
  - (2) Place an X in the appropriate box corresponding to either *new* or *existing* ship.
    - (a) *New* is a ship having a keel laid date on or after September 27, 2003, or a delivery date on or after September 27, 2006.
    - (b) *Existing* is a ship having a keel laid date before September 27, 2003, or a delivery date before September 27, 2006.
  - (3) Insert the vessel's keel laid date or delivery date, as appropriate.

- (4) Select the type of sewage system installed onboard the vessel by placing an X in the appropriate box for  .1 Sewage Treatment Plant,  .2 Comminuter, and/or  .3 Holding Tank. For each type of installed system, enter the equipment particulars in the area below the checked box. Vessels equipped with more than one type of system may have an X placed in all that apply.
- (a) For *sewage treatment plant*, enter the equipment model number in type of sewage treatment plant, the name of the manufacturer, and indicate the applicable effluent standard under MARPOL Annex IV by placing an X in either MEPC.2(VI) or MEPC.159(55). See the U.S. Coast Guard Certificate of Approval for equipment particulars.
- (b) For *comminuter*, enter the equipment model number in type, the name of the manufacturer, and enter *33 CFR Part 159 – Type II* in standard of sewage after disinfection. Do not enter any particulars of a holding tank that is part of a comminuter system. See the U.S. Coast Guard Certificate of Approval for equipment particulars.
- (c) For *holding tank*, enter the tank capacity, location of the tank, and other equipment particulars being careful to enter all values in SI units as indicated on the form. Do not enter any particulars of a holding tank that is part of a comminuter system. The values entered for maximum service speed, maximum summer draft, and breadth on page 1 of the form will automatically generate a table on page 2 indicating the maximum permissible discharge rates for untreated sewage. See the U.S. Coast Guard Certificate of Approval or Letter of Approval for equipment particulars.
1. Tank capacity. Enter the total capacity (i.e., volume) of the holding tank in cubic meters. To convert from English to SI units, multiply cubic feet by 0.02832 to obtain cubic meters or multiply gallons by 0.003785 to obtain cubic meters.
  2. Location. Enter the physical location of the holding tank using space, frame, side, etc.
  3. Maximum service speed. Enter the maximum service speed in knots from data on the vessel's speed curve.
  4. Maximum summer draft. Enter the maximum summer draft (i.e., deepest draft) in meters by subtracting the summer freeboard listed on load line certificate from the total molded depth. Multiply feet by 0.3048 to obtain meters.
  5. Breadth. Enter the breadth of the vessel in meters directly from the tonnage certificate. Multiply feet by 0.3048 to obtain meters.
- (5) In the blank after *This Certificate is valid until*, insert the SOVC validity (i.e., expiration) date by selecting a date that is not more than five years from the date of issue. See also paragraph 1.c.(2) above for setting an expiration date following a renewal survey.

- (6) In the blank after *Completion date of survey*, insert the date that the installed sewage system was recently examined or surveyed by OCMI or ACS.
  - (7) In the two blank spaces after *Issued at*, insert the city and state where the SOVC is being issued.
  - (8) Attach the following documents to the SOVC:
    - (a) For *sewage treatment plants*, attach a copy of the U.S. Coast Guard Certificate of Approval and a copy of the laboratory test results.
    - (b) For *sewage comminuting and disinfecting system with holding tank*, attach a copy of the U.S. Coast Guard Certificate of Approval. Laboratory test results are not required.
    - (c) For *sewage holding tank*, attach a copy of the U.S. Coast Guard Certificate of Approval, or if one is not required, attach the letter from MSC indicating that the holding tank meets the requirements of Regulation 9.1.3 in MARPOL Annex IV and 33 CFR 159. The vessel owner/operator may contact the MSC to obtain a letter before the SOVC is issued.
  - (9) Insert the date of issue and the name and title of the person signing on behalf of the OCMI or ACS. Sign the document in blue ink and affix a crimped seal.
  - (10) Scan the signed original SOVC including appropriate attachments into MISLE. See paragraph 3 below for MISLE entry requirements.
  - (11) Send the signed original SOVC including appropriate attachments to the vessel.
- e. Endorsements to Extend Certificate. The reverse side of the SOVC contains three endorsements to extend the validity period of an existing certificate. When the SOVC is first issued these endorsements are usually blank. The cognizant OCMI or ACS, as appropriate, may later endorse an original SOVC using the guidance contained in the relevant MARPOL Annex IV regulations that are cited after each endorsement (e.g., regulation 8.3) on the form. After endorsing an SOVC, scan a copy into documents in MISLE and provide the signed original endorsed SOVC to the vessel. See paragraph 3 below for MISLE entry instructions.
  - f. Safety Management. Ship staff training should also include familiarization in the operation and maintenance of the sewage system as required by the Ship's Safety Management Systems under the ISM Code.
  - g. Casualty and Repair. The owner or operator of a U.S. registered vessel that holds a SOVC for MARPOL Annex IV should notify, as soon as practicable, the nearest OCMI or ACS, as appropriate, of any system degradation (e.g., defect, accident, malfunction, etc.) that affects the performance of the installed sewage system. The cognizant OCMI or ACS may, at its discretion, allow a reasonable period of time for repairs to be made or allow the vessel to proceed to an alternate port or repair yard, as appropriate, for repairs especially when the vessel does not

present an unreasonable threat of harm to the marine environment. In this case, form CG-835 may be used.

- h. Non-Compliance. The cognizant OCMI or ACS may, at its discretion, withdraw a SOVC held by a U.S. vessel found not substantially compliant with the provisions of MARPOL Annex IV especially when that vessel presents an unreasonable threat of harm to the marine environment. Any non-compliance will be documented in MISLE.
- i. Expiration. The SOVC for MARPOL Annex IV becomes invalid at expiration unless endorsed with an extension and immediately after a change in the vessel's flag.
- j. U.S. Regulations. Any U.S. registered vessel that holds a valid SOVC for MARPOL Annex IV will be accepted by the U.S. Coast Guard as being in compliance with U.S. regulations contained in reference (e) as it relates to the design, construction, testing, and certification of sewage systems, while operating in waters subject to the jurisdiction of the United States.
- k. Existing Certificates of Equivalency. The cognizant OCMI or ACS, as appropriate, may continue to issue and renew existing Certificates of Equivalency to U.S. vessels under the provisions of MOC Policy Letter No. 03-03 until January 1, 2010, at which time all such certificates will expire. SOVC certificates are required on or after January 1, 2010.

## 2. NON-U.S. REGISTRY.

- a. Reciprocity. Any vessel flagged or registered outside the United States that holds a valid ISPPC issued by its flag Administration indicating the installed sewage system complies with MARPOL Annex IV as amended by either resolution MEPC.159(55) or MEPC.2(VI) will be accepted by the U.S. Coast Guard as being in compliance with U.S. regulations contained in reference (e) as it relates to the design, construction, testing, and certification, while operating in waters subject to the jurisdiction of the United States.
- b. Compliance. Acceptance of a valid ISPPC is conditional on the installed sewage system being substantially in an operable condition as required by MARPOL Annex IV and may be subject to verification by the U.S. Coast Guard under port State control.
- c. Non-compliance. Any vessel flagged or registered outside the United States that is not in compliance with MARPOL Annex IV is required instead to comply with 33 CFR Part 159 while operating in waters subject to the jurisdiction of the United States. Other applicable U.S. laws or regulations may provide for enforcement actions in the case of non-compliance e.g., discharge of sewage, negligence, etc. Additionally, any vessel operating on waters subject to the jurisdiction of the United States that is non-compliant with MARPOL Annex IV and non-compliant with 33 CFR Part 159 may be subject to control actions restricting the movement of the vessel as deemed appropriate by the Captain of the Port (COTP).
- d. Statement of Voluntary Compliance. SOVC certificates issued by the U.S. Coast Guard are not available to vessels flagged outside the United States.

3. MISLE Entries. The inspector that performs a MARPOL Annex IV examination (e.g., initial survey, renewal survey, etc.) shall enter the results in MISLE. First create a new vessel activity and then select activity type *Vessel Inspection/PSC*. For activity title/description, enter *MARPOL Annex IV Examination*. Under the inspections tab add a new inspection and select inspection type of *MARPOL Annex IV Examination* from the drop down list, being certain to select the correct entry having Roman numeral four (IV). Provide a brief narrative summary that includes the type of survey performed (e.g., initial survey, renewal survey, etc.) and results of the examination. See survey paragraph 1.c above for sample language. Once signed, scan the original SOVC, front and back, and all related attachments from paragraph 1.d.(8) above as one document into MISLE. If the examination activity is still open, then simply add the scanned documents to Documents/Certificates and select document type *MARPOL Annex IV SOVC* from the drop down list, being certain to select the correct entry having Roman numeral four (IV). Otherwise add the scanned documents to the vessel's *Documents* file in MISLE. For certificate entry in MISLE, enter the certificate issue date and expire date, leaving blank the certificate number and audit survey date. Once the activity is complete, it may be reviewed and closed at the field unit level or as otherwise required by local instruction. When the SOVC is issued by an ACS, the OCMI shall ensure a copy is obtained and entered in to MISLE as above.
  
4. CONTACT INFORMATION. For more information on this section including vessel certificates and reciprocity, please contact:

COMMANDANT (CG-543)  
US COAST GUARD  
ATTN OFFICE OF VESSEL ACTIVITIES  
2100 2ND ST SW STOP 7581  
WASHINGTON DC 20593-7581  
Phone: 1 (202) 372-1250  
Fax: 1 (202) 372-1917

## STATEMENT OF VOLUNTARY COMPLIANCE FOR ANNEX IV OF MARPOL 73/78

Issued to prove voluntary compliance with the provisions of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (hereinafter referred to as "the Convention") under the authority of the Government of:



**THE UNITED STATES OF AMERICA**

By the

**United States Coast Guard**

Name of ship	Distinctive number or letters	IMO number	Port of registry	Gross tonnage	Number of persons certified to carry
Sea Spirit	1012345	9101234	Falling Waters, WV	8769	23

Type of ship:     New             Existing                      Keel laid date or delivery date:    19-Oct-07

THIS IS TO CERTIFY

1. That the ship is equipped with a sewage system and a discharge pipeline in compliance with regulations 9 and 10 of Annex IV of the Convention as follows:

<input checked="" type="checkbox"/> .1 Sewage Treatment Plant:	<input type="checkbox"/> .2 Comminuter:	<input type="checkbox"/> .3 Holding Tank:
.1 Type of sewage treatment plant: OMP-2100	.1 Type of comminuter:	.1 Total capacity of holding tank [m <sup>3</sup> ]:
.2 Name of manufacturer: Advanced Systems, Inc.	.2 Name of manufacturer:	.2 Location:
.3 The sewage treatment plant is certified by the Administration to meet the effluent standards as provided for in resolution  <input type="checkbox"/> MEPC.2(VI) <input checked="" type="checkbox"/> MEPC.159(55)	.3 Standard of sewage after disinfection:	.3 Maximum service speed [kts]:
		.4 Maximum summer draft [m]:
		.5 Breadth [m]:

- .4 A pipeline for the discharge of sewage to a reception facility, fitted with a standard shore connection.
2. That the ship has been surveyed in accordance with regulation 4 of Annex IV of the Convention.
3. That the survey shows that the structure, equipment, systems, fittings, arrangements and material of the ship fully complies with the applicable requirements of Annex IV of the Convention.

This Certificate is valid until 21-Feb-14 subject to surveys in accordance with regulation 4 of Annex IV of the Convention.

Completion date of survey: 19-Feb-09

Issued at Baltimore, Maryland

22-Feb-2009  
Date of Issue

A. B. JONES CDR  
Officer in Charge, Marine Inspection, U.S. Coast Guard



Sample

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The Coast Guard estimates that the average burden for this report is 10 minutes. You may submit comments concerning the accuracy of this burden estimate or any suggestions for reducing the burden to COMDT (CG-543), U.S. Coast Guard, Washington, DC 20593-0001 or Office of Management and Budget, Paperwork Reduction Project (1625-0041), Washington, DC 20503.

Figure 1            Sample SOVC for *Sewage Treatment Plant*.

**ENDORSEMENTS TO EXTEND CERTIFICATE**

**Endorsement to extend Certificate if valid for less than 5 years (regulation 8.3):**

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation 8.3 of Annex IV of the Convention, be accepted as valid until \_\_\_\_\_.

Signed: \_\_\_\_\_

Place: \_\_\_\_\_

(seal)

Date: \_\_\_\_\_

**Endorsement where the renewal survey has been completed (regulation 8.4):**

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation 8.4 of Annex IV of the Convention, be accepted as valid until \_\_\_\_\_.

Signed: \_\_\_\_\_

Place: \_\_\_\_\_

(seal)

Date: \_\_\_\_\_

**Endorsement to extend the validity of the Certificate until reaching port of survey or for a period of grace (regulation 8.5 or 8.6):**

This Certificate shall, in accordance with regulation 8.5 or 8.6 (strike one) of Annex IV of the Convention, be accepted as valid until \_\_\_\_\_.

**Sample**

(seal)

Signed: \_\_\_\_\_

Place: \_\_\_\_\_

Date: \_\_\_\_\_

**MAXIMUM PERMISSIBLE DISCHARGE RATE [m<sup>3</sup>/h] for HOLDING TANKS of UNTREATED SEWAGE**

Draft [m]	Ship's Speed [kts]				
	4.0	3.0	2.0	1.0	
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0

Before discharging untreated sewage in accordance with regulation 11.1.1 of MARPOL Annex IV, the crew member responsible for sewage operations should ensure that the ship is en route, more than 12 nautical miles from nearest land, and the ship's speed is consistent with the maximum permissible discharge rate approved by the Administration in this table.

**STATEMENT OF VOLUNTARY COMPLIANCE  
FOR ANNEX IV OF MARPOL 73/78**

Issued to prove voluntary compliance with the provisions of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (hereinafter referred to as "the Convention") under the authority of the Government of:



**THE UNITED STATES OF AMERICA**

By the

**United States Coast Guard**

Name of ship	Distinctive number or letters	IMO number	Port of registry	Gross tonnage	Number of persons certified to carry
Pacific Trade	543125	9123455	Falling Waters, WV	13805	63

Type of ship:     New         Existing                      Keel laid date or delivery date:    29-Oct-62

**THIS IS TO CERTIFY**

1. That the ship is equipped with a sewage system and a discharge pipeline in compliance with regulations 9 and 10 of Annex IV of the Convention as follows:

<input type="checkbox"/> .1 Sewage Treatment Plant:	<input checked="" type="checkbox"/> .2 Comminuter:	<input type="checkbox"/> .3 Holding Tank:
.1 Type of sewage treatment plant:	.1 Type of comminuter: CM-425-D	.1 Total capacity of holding tank [m <sup>3</sup> ]:
.2 Name of manufacturer:	.2 Name of manufacturer: Treatment Units, Inc.	.2 Location:
.3 The sewage treatment plant is certified by the Administration to meet the effluent standards as provided for in resolution  <input type="checkbox"/> MEPC.2(VI) <input type="checkbox"/> MEPC.159(55)	.3 Standard of sewage after disinfection: 33 CFR Part 159 - Type II	.3 Maximum service speed [kts]:
		.4 Maximum summer draft [m]:
		.5 Breadth [m]:

- .4 A pipeline for the discharge of sewage to a reception facility, fitted with a standard shore connection.
2. That the ship has been surveyed in accordance with regulation 4 of Annex IV of the Convention.
3. That the survey shows that the structure, equipment, systems, fittings, arrangements and material of the ship fully complies with the applicable requirements of Annex IV of the Convention.

This Certificate is valid until 21-Feb-14 subject to surveys in accordance with regulation 4 of Annex IV of the Convention.

Completion date of survey: 10-Feb-09

Issued at Miami, Florida

22-Feb-2009  
Date of Issue

A. J. Jones, CAPT  
Officer in Charge, Marine Inspection, U.S. Coast Guard



**Sample**

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The Coast Guard estimates that the average burden for this report is 10 minutes. You may submit comments concerning the accuracy of this burden estimate or any suggestions for reducing the burden to COMDT (CG-543), U.S. Coast Guard, Washington, DC 20593-0001 or Office of Management and Budget, Paperwork Reduction Project (1625-0041), Washington, DC 20503.

Figure 2      Sample SOVC for Sewage Comminuting and Disinfecting System.

**ENDORSEMENTS TO EXTEND CERTIFICATE**

**Endorsement to extend Certificate if valid for less than 5 years (regulation 8.3):**

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation 8.3 of Annex IV of the Convention, be accepted as valid until \_\_\_\_\_.

Signed: \_\_\_\_\_

Place: \_\_\_\_\_

(seal)

Date: \_\_\_\_\_

**Endorsement where the renewal survey has been completed (regulation 8.4):**

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation 8.4 of Annex IV of the Convention, be accepted as valid until \_\_\_\_\_.

Signed: \_\_\_\_\_

Place: \_\_\_\_\_

(seal)

Date: \_\_\_\_\_

**Endorsement to extend the validity of the Certificate until reaching port of survey or for a period of grace (regulation 8.5 or 8.6):**

This Certificate shall, in accordance with regulation 8.5 or 8.6 (strike one) of Annex IV of the Convention, be accepted as valid until \_\_\_\_\_.

**Sample**

(seal)

Signed: \_\_\_\_\_

Place: \_\_\_\_\_

Date: \_\_\_\_\_

**MAXIMUM PERMISSIBLE DISCHARGE RATE [m<sup>3</sup>/h] for HOLDING TANKS of UNTREATED SEWAGE**

Draft [m]	Ship's Speed [kts]				
	4.0	3.0	2.0	1.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0

Before discharging untreated sewage in accordance with regulation 11.1.1 of MARPOL Annex IV, the crew member responsible for sewage operations should ensure that the ship is en route, more than 12 nautical miles from nearest land, and the ship's speed is consistent with the maximum permissible discharge rate approved by the Administration in this table.

**STATEMENT OF VOLUNTARY COMPLIANCE  
FOR ANNEX IV OF MARPOL 73/78**

Issued to prove voluntary compliance with the provisions of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (hereinafter referred to as "the Convention") under the authority of the Government of:



**THE UNITED STATES OF AMERICA**

By the

**United States Coast Guard**

Name of ship	Distinctive number or letters	IMO number	Port of registry	Gross tonnage	Number of persons certified to carry
Solstice	1012345	9101234	Falling Waters, WV	259	20

Type of ship:     New         Existing        Keel laid date or delivery date:    09-Mar-02

**THIS IS TO CERTIFY**

1. That the ship is equipped with a sewage system and a discharge pipeline in compliance with regulations 9 and 10 of Annex IV of the Convention as follows:

<input type="checkbox"/> .1 Sewage Treatment Plant:	<input type="checkbox"/> .2 Comminuter:	<input checked="" type="checkbox"/> .3 Holding Tank:
.1 Type of sewage treatment plant:	.1 Type of comminuter:	.1 Total capacity of holding tank [m <sup>3</sup> ]: 10.00
.2 Name of manufacturer:	.2 Name of manufacturer:	.2 Location: Aft center tank
.3 The sewage treatment plant is certified by the Administration to meet the effluent standards as provided for in resolution  <input type="checkbox"/> MEPC.2(VI) <input type="checkbox"/> MEPC.159(55)	.3 Standard of sewage after disinfection:	.3 Maximum service speed [kts]: 24.00
		.4 Maximum summer draft [m]: 2.50
		.5 Breadth [m]: 4.20

- .4 A pipeline for the discharge of sewage to a reception facility, fitted with a standard shore connection.
- 2. That the ship has been surveyed in accordance with regulation 4 of Annex IV of the Convention.
- 3. That the survey shows that the structure, equipment, systems, fittings, arrangements and material of the ship fully complies with the applicable requirements of Annex IV of the Convention.

This Certificate is valid until 10-Feb-14 subject to surveys in accordance with regulation 4 of Annex IV of the Convention.

Completion date of survey: 25-Jan-09

Issued at New Orleans, Louisiana

11-Feb-2009

Date of Issue

*A. B. Smith*  
A. B. SMITH, CAPT

Officer in Charge, Marine Inspection, U.S. Coast Guard



**Sample**

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The Coast Guard estimates that the average burden for this report is 10 minutes. You may submit comments concerning the accuracy of this burden estimate or any suggestions for reducing the burden to COMDT (CG-543), U.S. Coast Guard, Washington, DC 20593-0001 or Office of Management and Budget, Paperwork Reduction Project (1625-0041), Washington, DC 20503.

Figure 3      Sample SOVC for Sewage Holding Tank.

**ENDORSEMENTS TO EXTEND CERTIFICATE**

**Endorsement to extend Certificate if valid for less than 5 years (regulation 8.3):**

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation 8.3 of Annex IV of the Convention, be accepted as valid until \_\_\_\_\_.

Signed: \_\_\_\_\_

Place: \_\_\_\_\_

(seal)

Date: \_\_\_\_\_

**Endorsement where the renewal survey has been completed (regulation 8.4):**

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation 8.4 of Annex IV of the Convention, be accepted as valid until \_\_\_\_\_.

Signed: \_\_\_\_\_

Place: \_\_\_\_\_

(seal)

Date: \_\_\_\_\_

**Endorsement to extend the validity of the Certificate until reaching port of survey or for a period of grace (regulation 8.5 or 8.6):**

This Certificate shall, in accordance with regulation 8.5 or 8.6 (strike one) of Annex IV of the Convention, be accepted as valid until \_\_\_\_\_.

**Sample**

(seal)

Signed: \_\_\_\_\_

Place: \_\_\_\_\_

Date: \_\_\_\_\_

**MAXIMUM PERMISSIBLE DISCHARGE RATE [m<sup>3</sup>/h] for HOLDING TANKS of UNTREATED SEWAGE**

Draft [m]	Ship's Speed [kts]				
	4.0	9.0	14.0	19.0	24.0
1.5	0.2	0.5	0.8	1.1	1.4
1.8	0.3	0.6	1.0	1.3	1.6
2.0	0.3	0.7	1.1	1.5	1.9
2.3	0.4	0.8	1.2	1.7	2.1
2.5	0.4	0.9	1.4	1.8	2.3

Before discharging untreated sewage in accordance with regulation 11.1.1 of MARPOL Annex IV, the crew member responsible for sewage operations should ensure that the ship is en route, more than 12 nautical miles from nearest land, and the ship's speed is consistent with the maximum permissible discharge rate approved by the Administration in this table.

**STATEMENT OF VOLUNTARY COMPLIANCE  
FOR ANNEX IV OF MARPOL 73/78**

Issued to prove voluntary compliance with the provisions of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (hereinafter referred to as "the Convention") under the authority of the Government of:



**THE UNITED STATES OF AMERICA**

By the

**United States Coast Guard**

Name of ship	Distinctive number or letters	IMO number	Port of registry	Gross tonnage	Number of persons certified to carry
Ocean Trade	1012345	9101234	Falling Waters, WV	14215	623

Type of ship:  New  Existing Keel laid date or delivery date: 22-Oct-01

THIS IS TO CERTIFY

1. That the ship is equipped with a sewage system and a discharge pipeline in compliance with regulations 9 and 10 of Annex IV of the Convention as follows:

<input checked="" type="checkbox"/> .1 Sewage Treatment Plant:	<input type="checkbox"/> .2 Comminuter:	<input checked="" type="checkbox"/> .3 Holding Tank:
.1 Type of sewage treatment plant: OMP-2100	.1 Type of comminuter:	.1 Total capacity of holding tank [m <sup>3</sup> ]: 100.00
.2 Name of manufacturer: Advanced Systems, Inc.	.2 Name of manufacturer:	.2 Location: Frame 56, center
.3 The sewage treatment plant is certified by the Administration to meet the effluent standards as provided for in resolution  <input checked="" type="checkbox"/> MEPC.2(VI) <input type="checkbox"/> MEPC.159(55)	.3 Standard of sewage after disinfection:	.3 Maximum service speed [kts]: 28.00
		.4 Maximum summer draft [m]: 5.20
		.5 Breadth [m]: 10.00

.4 A pipeline for the discharge of sewage to a reception facility, fitted with a standard shore connection.

2. That the ship has been surveyed in accordance with regulation 4 of Annex IV of the Convention.  
3. That the survey shows that the structure, equipment, systems, fittings, arrangements and material of the ship fully complies with the applicable requirements of Annex IV of the Convention.

This Certificate is valid until 21-Mar-14 subject to surveys in accordance with regulation 4 of Annex IV of the Convention.

Completion date of survey: 18-Mar-09

Issued at San Francisco California

22-Mar-2009

Date of Issue

J. R. JONES, CAPT

Officer in Charge, Marine Inspection, U.S. Coast Guard



**Sample**

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The Coast Guard estimates that the average burden for this report is 10 minutes. You may submit comments concerning the accuracy of this burden estimate or any suggestions for reducing the burden to COMDT (CG-543), U.S. Coast Guard, Washington, DC 20593-0001 or Office of Management and Budget, Paperwork Reduction Project (1625-0041), Washington, DC 20503.

Figure 4 Sample SOVC for Sewage Treatment Plant and Sewage Holding Tank.

**ENDORSEMENTS TO EXTEND CERTIFICATE**

**Endorsement to extend Certificate if valid for less than 5 years (regulation 8.3):**

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation 8.3 of Annex IV of the Convention, be accepted as valid until \_\_\_\_\_.

Signed: \_\_\_\_\_

Place: \_\_\_\_\_

(seal)

Date: \_\_\_\_\_

**Endorsement where the renewal survey has been completed (regulation 8.4):**

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation 8.4 of Annex IV of the Convention, be accepted as valid until \_\_\_\_\_.

Signed: \_\_\_\_\_

Place: \_\_\_\_\_

(seal)

Date: \_\_\_\_\_

**Endorsement to extend the validity of the Certificate until reaching port of survey or for a period of grace (regulation 8.5 or 8.6):**

This Certificate shall, in accordance with regulation 8.5 or 8.6 (strike one) of Annex IV of the Convention, be accepted as valid until \_\_\_\_\_.

**Sample**

(seal)

Signed: \_\_\_\_\_

Place: \_\_\_\_\_

Date: \_\_\_\_\_

**MAXIMUM PERMISSIBLE DISCHARGE RATE [m<sup>3</sup>/h] for HOLDING TANKS of UNTREATED SEWAGE**

Draft [m]	Ship's Speed [kts]				
	4.0	10.0	16.0	22.0	28.0
3.1	1.2	2.9	4.6	6.4	8.1
3.6	1.3	3.4	5.4	7.4	9.4
4.2	1.5	3.9	6.2	8.5	10.8
4.7	1.7	4.3	6.9	9.5	12.1
5.2	1.9	4.8	7.7	10.6	13.5

Before discharging untreated sewage in accordance with regulation 11.1.1 of MARPOL Annex IV, the crew member responsible for sewage operations should ensure that the ship is en route, more than 12 nautical miles from nearest land, and the ship's speed is consistent with the maximum permissible discharge rate approved by the Administration in this table.