

**Chapter 532: LARGE COMMERCIAL PASSENGER VESSELS**

**SUMMARY:** This chapter describes standards related to the discharge to coastal waters of graywater, or discharge of a mixture of blackwater and graywater, from a large commercial passenger vessel.

1. **Applicability.** This chapter applies to discharges to coastal waters of graywater and mixtures of graywater and blackwater from large commercial passenger vessels that require authorization under a general permit to discharge as provided in 38 M.R.S.A. § 423-D(4). Nothing in this chapter is intended to repeal or replace other applicable requirements under state law.

Portions of this rule refer to federal regulations of the United States Environmental Protection Agency (EPA). The federal regulations referenced are those regulations effective as of July 1, 2004, as they appear in volume 40 of the Code of Federal Regulations (CFR).

2. **Definitions.** As used in this chapter, unless the context otherwise indicates, the following terms have the following meanings.

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NOTE: The following terms are defined in statute at 38 M.R.S.A. § 423-D(1): "blackwater", "coastal waters", "commercial passenger vessel", "graywater", "large commercial passenger vessel", "no-discharge zone" and "small commercial passenger vessel".

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- A. **Department.** Maine Department of Environmental Protection (department).
  - B. **Conventional pollutants.** The pollutants listed in 40 CFR 401.16 and 06-096 CMR 525(4)(VII).
  - C. **Discharge.** A release, however caused, from a large commercial passenger vessel, and includes, any escape, disposal, spilling, leaking, pumping, emitting or emptying.
  - D. **Environmental compliance records.** Includes the Sewage and Graywater Discharge Record Book, all discharge reports, all discharge sampling test results, as well as any other records that must be kept under this chapter.
  - E. **Priority pollutant.** The toxic pollutants listed in 40 CFR 401.15 and 06-096 CMR 525(4)(VI).
3. **Effluent quality.** The discharge to coastal waters must satisfy the minimum level of effluent quality specified by the following secondary treatment standards. The following paragraphs describe the minimum level of effluent quality attainable by secondary treatment in terms of the parameters biochemical oxygen demand with a 5-day incubation period (BOD 5), suspended solids (SS) and pH. All requirements for each parameter must be achieved.
    - A. **BOD 5, SS, and pH**
      - (1) BOD 5 --
        - (a) The 30-day average may not exceed 30 mg/l.
        - (b) The 7-day average may not exceed 45 mg/l.
        - (c) The 30-day average percent removal may not be less than 85 percent.

- (d) At the option of the department, in lieu of the parameter BOD 5 and the levels of the effluent quality specified in subparagraphs 3(A)(1)(a), (b) and (c) of this chapter, the parameter CBOD 5 (carbonaceous BOD 5) may be substituted with the following levels of the CBOD 5 effluent quality.
    - (i) The 30-day average may not exceed 25 mg/l.
    - (ii) The 7-day average may not exceed 40 mg/l.
    - (iii) The 30-day average percent removal may not be less than 85 percent.
  - (2) SS --
    - (a) The 30-day average may not exceed 30 mg/l.
    - (b) The 7-day average may not exceed 45 mg/l.
    - (c) The 30-day average percent removal may not be less than 85 percent.
  - (3) pH -- The effluent values for pH must be maintained within the limits of 6.0 to 9.0 unless the owner or operator demonstrates that inorganic chemicals are not added to the waste stream as part of the treatment process.
- B. Fecal coliform.** The geometric mean of the samples from the discharge during any 30-day period does not exceed 20 fecal coliform/100 ml and not more than 10 percent of the samples exceed 40 fecal coliform/100 ml.
- C. Chlorine.** Concentrations of total residual chlorine may not exceed 10.0 µg/l (micrograms/liter).
- D. Test results.** Prior to any such discharge occurring, the owner, operator or master, or other person in charge of a large commercial passenger vessel, can demonstrate test results from at least five samples taken from the vessel representative of the effluent to be discharged, on different days over a 30-day period, conducted in accordance with the guidelines in 40 CFR Part 136, which confirm that the water quality of the effluents proposed for discharge is in compliance with subsections (A), (B), and (C). The owner, operator, master or other person in charge of a large commercial passenger vessel shall demonstrate continued compliance through periodic sampling. Such sampling and test results are considered environmental compliance records that must be made available upon request of the department.
- 4. Sewage and Graywater Discharge Record Book.** While operating in Maine coastal waters each large commercial passenger vessel must maintain, in English, a legible Sewage and Graywater Discharge Record Book with the vessel's name and official number listed on the front cover and at the top of each page.
- A. When entries are made.** Entries must be made in the Sewage and Graywater Discharge Record Book whenever any of the following is released into the coastal waters of Maine: (1) treated or untreated sewage; (2) graywater; or (3) sewage and graywater mixture.

**B. Content of entries.** Each entry in the Sewage and Graywater Discharge Record Book must, at a minimum, contain the following information:

- (1) Name and location of each discharge port within the ship;
- (2) Date the start of discharge occurred;
- (3) Whether the effluent is treated or untreated sewage, graywater, or a sewage and graywater mixture and type of treatment used;
- (4) Time discharge port is opened;
- (5) Vessel's latitude and longitude or universal transverse mercator coordinates at the time the discharge port is opened;
- (6) Volume discharged in cubic meters;
- (7) Flow rate of discharge in liters per minute;
- (8) Time discharge port is secured;
- (9) Vessel's latitude and longitude or universal transverse mercator (UTM) at the time the discharge port is secured; and
- (10) Vessel's minimum speed during discharge.

**C. Statement concerning emergency, accidental or exceptional discharge.** In the event of an emergency, accidental or other exceptional discharge of sewage or graywater, a statement must be made in the Sewage and Graywater Discharge Record Book of the circumstances and reasons for the discharge and an immediate notification of the discharge must be made to department.

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NOTE: Discharges of blackwater or graywater from a large commercial passenger vessel to coastal waters must be reported to the department as provided in 38 M.R.S.A. § 423-D(3).

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**D. Date and sign.** Each entry of a discharge must be recorded without delay and signed and dated by the person or persons in charge of the discharge concerned and each completed page must be signed and dated by the master or other person having charge of the ship.

**E. Location.** The Sewage and Graywater Discharge Record Book must be kept in such a place as to be readily available for inspection at all reasonable times and must be kept on board the ship.

**F. Maintenance responsibility.** The master or other person having charge of a ship required to keep a Sewage and Graywater Discharge Record Book is responsible for the maintenance of such record.

**G. Time period.** The Sewage and Graywater Discharge Record Book must be maintained on board for not less than three years.

## 5. Sampling and reporting

**A. Sampling.** The owner, operator, master or other person in charge of a large commercial passenger vessel that discharges graywater or a mixture of graywater and blackwater in the coastal waters of Maine shall:

- (1) Not less than 90 days prior to each vessel's initial entry into the coastal waters of Maine during any calendar year, provide to the department certification of participation under a Quality Assurance/Quality Control Plan (QA/QCP) accepted by the department for sampling and analysis of graywater or a mixture of graywater and blackwater for the current operating season;
- (2) Not less than 30 days nor more than 120 days prior to the large commercial passenger vessel's initial entry into the coastal waters of Maine during any calendar year, provide a certification to the department that the large commercial passenger vessel's graywater and mixture of graywater and blackwater is permitted and meets the standards specified in Section 3.
- (3) Within 30 days of each vessel's initial entry into the coastal waters of Maine during any calendar year, provide to the department a Vessel Specific Sampling Plan (VSSP) for review and acceptance, and undergo sampling and testing for conventional pollutants of all treated graywater or mixture of graywater and blackwater effluents as directed by the department;
- (4) While operating in the coastal waters of Maine be subject to unannounced sampling of graywater or mixture of graywater and blackwater discharge effluents for the purpose of testing for a limited suite, as determined by the department, of priority pollutants;
- (5) While operating in the coastal waters of Maine be subject to additional random sampling events, in addition to all other required sampling, of some or all graywater or mixture of graywater and blackwater discharge effluents for conventional and/or priority pollutant testing as directed by the department;
- (6) Ensure all samples, as required by this section, are collected and tested by a laboratory accepted by the department for the testing of conventional and priority pollutants, as defined by this chapter, and in accordance with the large commercial passenger vessel's department accepted QA/QCP and VSSP; and
- (7) Pay all costs associated with development of an acceptable QA/QCP and VSSP, sampling and testing of effluents, reporting of results, and any additional environmental record keeping as required by this chapter, not to include cost of state regulatory oversight.

**B. Quality Assurance/Quality Control Plan (QA/QCP).** A QA/QCP must, at a minimum include:

- (1) Sampling techniques and equipment, sampling preservation methods and holding times, and transportation protocols, including chain of custody;
- (2) Laboratory analytical information including methods used, calibration, detection limits, and the laboratory's internal QA/QC procedures;
- (3) Quality assurance audits used to determine the effectiveness of the QA program; and

(4) Procedures and deliverables for data validation used to assess data precision and accuracy, the representative nature of the samples drawn, comparability, and completeness of measure parameters.

**C. Vessel Specific Sampling Plan (VSSP).** A VSSP is a working document used during the sampling events required under this section and must, at a minimum, include:

- (1) Vessel name;
- (2) Passenger and crew capacity of the vessel;
- (3) Daily water use of the vessel;
- (4) Holding tank capacities for treated sewage and graywater;
- (5) Vessel schematic of discharge ports and corresponding sampling ports;
- (6) Description of discharges; and
- (7) A table documenting the type of discharge, type of sample drawn (grab or composite), parameters to test for (conventional or priority pollutants), vessel location when sample drawn, date and time of the sampling event.

**D. Submission of test results.** Test results for conventional pollutants must be submitted within 15 calendar days of the date the sample was collected, and for priority pollutants within 30 calendar days of the date the sample was collected, to the department directly by the laboratory conducting the testing and in accordance with the department accepted QA/QCP.

**E. Retention of samples.** Samples collected for analysis under this chapter must be held by the laboratory contracted to do the analysis for not less than six months, or as directed by the department.

**F. Form of reports.** Reports required under this chapter may be written or electronic. If electronic, the reports must be in a format readable by department data systems.

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NOTE: Each governmental agency of the State determines whether, and the extent to which, it will send and accept electronic records. The government agency may specify the manner and format in which the electronic records must be created, generated, sent, communicated, received and stored. See 10 MRSA § 9418 (in part).

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**AUTHORITY:** 38 M.R.S.A. §§ 341-D, 413, and 423-D

**EFFECTIVE DATE:** May 25, 2005