

314 CMR 19.00: OIL SPILL PREVENTION AND RESPONSE

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19.01: Purpose and Authority

(1) The purpose of 314 CMR 19.00: *Oil Spill Prevention and Response* is to implement those provisions of St. 2004, c. 251: *An Act Relative to Oil Spill Prevention and Response in Buzzards Bay and Other Harbors and Bays of the Commonwealth*, and St. 2009, c. 101: *An Act Preventing Oil Spills in Buzzards Bay* (the Oil Spill Act), that are the responsibility of the Department to administer and enforce. The Oil Spill Act establishes M.G.L. c. 21M.

(2) The provisions of 314 CMR 19.00 are designed to prevent or reduce the risk of oil spills from Tank Vessels operating in Buzzards Bay and designated areas of special interest within Massachusetts waters. 314 CMR 19.00 provides an incentive for certain vessels to voluntarily engage a State Pilot to guide such vessel into or within Buzzards Bay; provide for the dispatch of a State-provided Tugboat Escort to certain Tank Vessels entering or operating in Buzzards Bay; and require certain vessels to engage the services of a Tugboat Escort while operating in designated Areas of Special Interest within Massachusetts waters.

(3) 314 CMR 19.00 is promulgated pursuant to the Department's authority in St. 2004, c. 251, including M.G.L. c. 21M, §§ 1 and 6, and in St. 2008, c. 268, including M.G.L. c. 21M, §§ 8 and 9, and St. 2009, c. 101, including M.G.L. c. 21M, § 9.

19.02: Definitions

Area of Special Interest - any water of the Commonwealth that is found by the Secretary of the Office of Environmental Affairs to contain one or more immobile obstacles to navigation, or abuts or includes areas of critical environmental concern, is designated as an estuary of national significance, abuts or includes habitat for endangered species, abuts or includes public recreation areas, supports shell fishing, fin fishing or tourist industries, or abuts or includes sensitive public safety areas. Such waters shall include, but not be limited to, Buzzards Bay, Vineyard Sound, and Mount Hope Bay.

Automatic Identification System (AIS) - a maritime navigation safety communications system standardized by the International Telecommunication Union (ITU) and adopted by the International Maritime Organization (IMO) that provides vessel information, including the vessel's identity, type, position, course, speed, navigational status, and other safety-related information automatically to appropriately equipped shore stations, other ships, and aircraft; receives automatically such information from similarly fitted ships; monitors and tracks ships; and exchanges data with shore-based facilities.

Automatic Radar Plotting Aid (ARPA) - a computer assisted radar data processing system that can be used to track objects using radar contacts, calculate the tracked object's course, speed and closest point of approach, thereby indicating if there is a danger of collision with another vessel or a landmass. A typical ARPA gives a presentation of a current situation and uses computer technology to predict future situations. An ARPA assesses the risk of collision, and enables the vessel operator to see proposed maneuvers by its own ship.

Buzzards Bay - the waterway bounded and described as follows: from Sakonnet Point southward to the north end of the Buzzards Bay traffic separation zone, to the southwestern tip of Cuttyhunk Island thence through Buzzards Bay to the eastern entrance of the Cape Cod Canal at the United States Coast Guard "CC" Buoy in Cape Cod Bay, including Woods Hole Passage and Quicks Hole.

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Buzzards Bay Approaches.

- (a) the area up to 120 nautical miles to the north and east of Buzzards Bay including the waters off of Portland Harbor, Maine in approximate position latitude 43°-31.7' N, longitude 70°-05.5' W and including all of Cape Cod Bay and its eastern approaches; and
- (b) the area up to 120 nautical miles to the west and south of the Buzzards Bay Entrance Light including all of Vineyard Sound, Narragansett Bay and Block Island Sound, and Long Island Sound as far west as Execution Rocks in approximate position latitude 40°-52.6' N, longitude 70°-44.3' W.

Contractor - the company selected by the Department pursuant to a competitive procurement to provide State-provided Tugboat Escort services, pursuant to the requirements in 314 CMR 19.06.

Cape Cod Canal - the waterway between the Cape Cod buoy at the eastern end of the entrance of the Cape Cod Canal in approximate position 41°-49.0' N, longitude 70°-27.7' W and the "G 1" buoy at the western entrance of the Cape Cod Canal in approximate position 41°-40.9' N, longitude 70°-40.8' W.

Commissioner - the Commissioner of the Department.

Department - the Massachusetts Department of Environmental Protection.

Electronic Chart Display and Information System (ECDIS) - a computer-based navigation information system that complies with International Maritime Organization (IMO) regulations and can be used in *lieu* of paper navigation charts in some areas. The true ECDIS system displays information from electronic navigational charts and integrates position information from the Global Positioning System (GPS) and other navigational sensors, such as radar, fathometer and automatic identification systems (AIS).

State Pilot - a pilot commissioned under M.G.L. c. 103, or a pilot having received a first class federal pilot's endorsement for the waters of Buzzards Bay and Cape Cod Canal prior to March 1, 2009 and having executed at least 15 round trips as a pilot in such waters within the three years preceding that date, proof of which shall be documented by submitting a Master's Letter of Discharge or notarized written affidavit by the pilot indicating the name of the vessel and the date(s) and time(s) of each trip covered by the affidavit.

State-provided Tugboat Escort - a Tugboat Escort, the primary purpose of which shall be to serve as an escort tug for unescorted Tank Vessels carrying 6,000 or more barrels of oil in Buzzards Bay, and which shall:

- (a) provide on-the-water-monitoring of these Tank Vessels;
- (b) have the ability to warn vessels of actual or potential threats to navigation;
- (c) be available to assist immediately to the threat of an accident;
- (d) not be more than ¼ of a nautical mile away from a Tank Vessel during such escort;
- (e) be equipped with:
 1. twin radar displays equipped with ECDIS or ARPA capable of integrating AIS;
 2. a towing winch and associated wire and gear capable of towing, at minimum, a 470 foot fully loaded Tank Vessel;
 3. firefighting equipment as provided in 314 CMR 19.06(3); and
 4. such other requirements, as specified in 314 CMR 19.06.

Tank Barge - a Tank Vessel without a means of self-propulsion or a self-propelled Tank Vessel less than 40 meters, 130 feet, in overall length.

Tank Vessel - a ship that is constructed or adapted to carry, or that carries, oil or other petroleum product in bulk as cargo and that operates on the Waters of the Commonwealth or transfers oil or other petroleum products in a port or place subject to the jurisdiction of the Commonwealth.

Target Vessel - a Tank Vessel operating in Buzzards Bay that is both carrying 6,000 or more barrels of oil as cargo, and unaccompanied by a Tugboat Escort.

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Tugboat Escort:

- (a) a tug with twin screws and a separate system for power to each screw, with an aggregate shaft horsepower equivalent to 4,000 horsepower or greater and a minimum bollard pull of 50 tons; or
- (b) a tractor tug, having an aggregate horsepower equivalent to 4,000 horsepower or greater and a minimum bollard pull of 50 tons, which is propelled by blades or screws which may be manipulated or rotated to provide propulsive thrust to any part of a 360° arc relative to the keel or longitudinal axis of the tug. As of January 1, 2006, a Tugboat Escort shall be equipped with fire fighting equipment and, at a minimum, shall meet the requirements of the following American Bureau of Shipping ("ABS") classifications: Fire Fighting Vessel Class 1 and Maltese Cross A1 (Towing Vessel).

Vessel Assistance - assistance rendered to a vessel in danger of grounding, allision or collision in the event of propulsion failure, parted tow line, loss of tow, fire, grounding, or any other circumstance that threatens the integrity or navigational safety of the vessel.

Vessel Movement Monitoring System - a shore-based system that provides real-time vessel tracking by satellite, radar, AIS or other means and that supplies information regarding vessel locations and traffic. Tracking data provided must include but is not limited to: vessel name, maritime mobile service identity number, navigation status, speed over ground, position, heading, type of ship and cargo, destination, estimated time of arrival, and operation route plan.

Waters of the Commonwealth - all waters within the jurisdiction of the Commonwealth, including, without limitation, rivers, streams, lakes, ponds, springs, impoundments, estuaries, wetlands, coastal waters, and ground waters.

19.03: Tugboat Escort Requirements(1) Tugboat Escort Requirement.

(a) Effective January 1, 2005, no Tank Vessel carrying 6,000 or more barrels of oil shall enter or transit any Area of Special Interest within waters of the Commonwealth unless such Tank Vessel is accompanied by a Tugboat Escort. This Tugboat Escort requirement does not apply to a self-propelled Tank Vessel. A Tugboat Escort shall meet the definition of that term in 314 CMR 19.02.

(b) The Department may authorize a Tank Vessel carrying 6,000 or more barrels of oil to enter or transit an Area of Special Interest without a Tugboat Escort, or, accompanied by a tugboat that does not meet the definition of a Tugboat Escort in 314 CMR 19.02 whenever the Department determines that:

1. there are no Tugboat Escorts reasonably available to accompany the Tank Vessel in the relevant Area of Special Interest; or
2. the delay in waiting for an available Tugboat Escort has or may reasonably result in a significant disruption of energy services to the public; or
3. the existence or threat of a public health, safety or environmental emergency or other unique circumstances warrant the Department's exercise of its enforcement discretion.

The Department may establish policies, procedures, and case-specific conditions to implement its authority under 314 CMR 19.03(1)(b). Any Department authorization for a Tank Vessel to enter or transit an Area of Special Interest without a Tugboat Escort, or, accompanied by a tugboat that does not meet the definition of a Tugboat Escort will relieve the owner or operator of such Tank Vessel from its obligation under 314 CMR 19.03(1)(a), to the extent specified in the Department's authorization. Nothing in 314 CMR 19.03(1)(b) or in a case-specific Department authorization shall be construed to relieve or otherwise limit the liability of the owner or operator of a Tank Vessel for any release of oil, hazardous material, or hazardous waste that occurs while the Tank Vessel enters or transits an Area of Special Interest pursuant to a Department authorization under 314 CMR 19.03(1)(b).

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(c) The owner or operator of any tug that is serving as a Tugboat Escort shall certify to the Department, on a form established by the Department for such purposes, that the tug meets the design specifications and equipment requirements in the definition of a Tugboat Escort in 314 CMR 19.02. The Department reserves the right to require the owner or operator of any tug that is serving as a Tugboat Escort to further demonstrate to the Department's satisfaction that the tug meets the design specifications in the definition of a Tugboat Escort in 314 CMR 19.02, including the required minimum bollard pull, and is equipped with fire fighting equipment and meets the required ABS classifications, effective January 1, 2006.

(2) Minimum Standards for Equipment on Tugboat Escorts. The following minimum standards for equipment apply to Tugboat Escorts:

(a) As of January 1, 2006, a Tugboat Escort shall be equipped with fire fighting equipment and, at a minimum, shall meet the requirements of the following ABS classifications: Fire Fighting Vessel Class 1 and Maltese Cross A1 (Towing Vessel).

(b) All Tugboat Escorts shall be equipped with and maintain in good working order:

1. primary and secondary VHF radios;
2. fendering appropriate to absorb the impact inherent in hull-to-hull operations;
3. power line handling equipment fore and aft to mechanically assist in the deployment and/or retrieval of tow lines;
4. tow lines, whether provided by the Tank Vessel and/or the Tugboat Escort, shall be maintained in sufficient number, length, condition and strength to assure effective control of the intended vessel maneuver, based on weather conditions, the Tank Vessel size, and the Tugboat Escort's bollard pull, and have a strength of at least 1.5 times the Tugboat Escort's bollard pull; and
5. sufficient braking force to stop a Tank Vessel that is not self-propelled.

(3) Minimum Standards for Personnel on Tugboat Escorts. The following minimum standards for personnel apply to Tugboat Escorts:

(a) Tugboat Escort crew members shall be certified pursuant to applicable federal laws.

(b) All Tugboat Escorts shall have sufficient and qualified line-handling capable crew members standing by and available to immediately receive lines from the Tank Vessel. The crew shall not be assigned duties that would interfere with their ability to immediately respond to an emergency situation.

(4) Pre-escort Conference. Prior to commencing an escorted transit, the tugboat captain shall contact the Tank Vessel master to confirm the position of the Tank Vessel, establish the radio frequency to be used and the anticipated direction of movement and destination of the Tank Vessel, and exchange other pertinent information that the tugboat captain and the Tank Vessel master deem necessary to facilitate operations in the case of an unplanned event.

(5) Reporting. The owner or operator of a tugboat shall submit to the Department a report on its Tugboat Escort activities on a form established by the Department for such purposes. Reporting shall occur on a quarterly basis or on another frequency specified by the Department. The owner or operator of the tugboat shall provide a copy of such report to the relevant Massachusetts pilot commissioner at the same time. At a minimum, the report shall include the following information:

- (a) the identity of all Tank Vessels escorted by the tugboat and a description of the type and the number of barrels of oil carried by the Tank Vessel as cargo;
- (b) the date and the transit route of all Tank Vessels escorted by the tugboat; and
- (c) a description of any problems encountered during the escorted transit and the response of the tugboat captain and/or the Tank Vessel master to such problems.

19.04: Transit Notifications

(1) Effective March 1, 2009, an owner or operator of a Tank Vessel carrying 6,000 or more barrels of oil as cargo may provide 24 hour notice to the Department of its intent to operate such vessel in Buzzards Bay.

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(2) Effective January 22, 2010, notice provided pursuant to 314 CMR 19.04(1), shall be received by the Department at least 24 hours prior to transit, or, if 24 hour notice is operationally infeasible, as soon as operationally feasible. Such notice shall be made by calling a telephone number published by the Department and designated for that purpose, or on a form established by the Department for such purpose, and shall include the following information:

- (a) name and number of the caller, if telephone notice is provided;
- (b) name, address, and telephone number of the owner or operator of the Tank Vessel;
- (c) name of the Tank Vessel, type of Tank Vessel, type of oil, quantity of oil (reported in barrels), hull construction (single, double, or other);
- (d) current location of the Tank Vessel;
- (e) port of departure and destination of the Tank Vessel;
- (f) estimated time of the Tank Vessel's entrance into the Buzzards Bay; and
- (g) whether the Tank Vessel is otherwise required by law to, and will engage a Tugboat Escort to transit Buzzards Bay.

(3) If the owner or operator of a Tank Vessel provides notice pursuant to 314 CMR 19.04(1) and the Tank Vessel stops in transit at a port within Buzzards Bay, the notice will apply to the transit from entry into Buzzards Bay to such port. The owner or operator may, prior to departure from the port, make a second notification of his intent to continue to operate a Tank Vessel in Buzzards Bay, as provided in 310 CMR 19.04(2).

19.05: Dispatching a State Pilot

(1) Effective March 1, 2009, if an owner or operator of a Tank Vessel provides notice pursuant to 314 CMR 19.04, the owner or operator may request the services of a State Pilot to assist the vessel to operate in Buzzards Bay. The Commonwealth shall pay the pilotage and reasonable associated costs, including but not limited to pilot boat fee, fuel surcharges, docking/undocking fees, standby fees and overtime, provided that the:

- (a) Tank Vessel is carrying 6,000 or more barrels of oil and is unaccompanied by a Tugboat Escort;
- (b) Tank Vessel owner or operator has provided notification pursuant to M.G.L. c. 21M, § 9(a) and 314 CMR 19.04;
- (c) Tank Vessel is not otherwise required by law to engage a pilot; and
- (d) State Pilot is not a member of the Tank Vessel's crew.

(2) For purposes of 314 CMR 19.05(1), the Tank Vessel owner or operator shall request a pilot by contacting the appropriate District 3 pilot dispatcher office during the normal course of business in District 3 Waters of the Commonwealth, as defined in M.G.L. c. 103, § 1, and according to the process established by the District 3 Deputy Pilot Commissioner.

(3) A pilot engaged pursuant to 314 CMR 19.05(1) shall comply with, and be subject to all the laws, rules, and regulations applicable to his or her commission.

19.06: State-provided Tugboat Escort Requirements

(1) Effective upon the date set by contract by the Department with a company to provide State-provided Tugboat Escorts, the Department will dispatch a State-provided Tugboat Escort in Buzzards Bay to every Target Vessel upon entering and while operating in Buzzards Bay.

(2) The Commissioner will contract with a company to provide State-provided Tugboat Escort services. Unless the Commissioner determines that exigent circumstances exist at a particular time, the Contractor shall, at a minimum:

- (a) Dispatch a State-provided Tugboat Escort to every Target Vessel;
- (b) Position each State-provided Tugboat Escort to maintain a maximum distance of $\frac{1}{4}$ (one fourth) of a nautical mile from the assigned Target Vessel;
- (c) Direct the State-provided Tugboat Escort to monitor the assigned Target Vessel and to warn of actual or potential navigational threats; and
- (d) Direct the State-provided Tugboat Escort to render Vessel Assistance to the assigned Target Vessel if and when such assistance is requested or otherwise determined to be necessary.

19.06: continued

(3) Minimum Standards for Equipment on State-provided Tugboat Escorts. At a minimum, State-provided Tugboat Escorts shall comply with the following:

- (a) Be a U.S. flagged vessel with a current load line certificate issued by a member of the International Association of Classification Societies (IACS);
- (b) Be either:
 - 1. a tug with twin screws and a separate system for power to each screw, with an aggregate shaft horsepower equivalent to 4,000 horsepower or greater and a minimum bollard pull of 50 tons; or
 - 2. a tractor tug, having an aggregate horsepower equivalent to 4,000 horsepower or greater and a minimum bollard pull of 50 tons, which is propelled by blades or screws which may be manipulated or rotated to provide propulsive thrust to any part of a 360° arc relative to the keel or longitudinal axis of the tug.
- (c) Meet or exceed NFPA 1925: *Standard on Marine Fire-Fighting Vessels*, 2008 Edition standards for Type V Marine fire-fighting vessels and special purpose fire-fighting vessels;
- (d) Be able to maintain a steady minimum speed of ten knots in a Beaufort sea state six (22-27 knots winds, seas up to 9½ feet) and have fuel capacity to allow for a minimum of 72 hours of continuous at sea operations;
- (e) Meet the stability criteria established by the U.S. Coast Guard in 46 CFR 173.095 and 174.145;
- (f) Carry at a minimum the following navigational, towing and rescue equipment:
 - 1. Complete and current navigation and communication technology, including gyro and magnetic compasses Global Positioning System (GPS), radio and telephone communications and twin radar displays equipped with ECDIS or ARPA integrated with an AIS capable of monitoring vessel movement in Buzzards Bay and its adjacent waterbodies;
 - 2. AIS transponder;
 - 3. A towing winch and associated wire and gear capable of towing at minimum, a 470 foot fully loaded Tank Vessel;
 - 4. An Orville Hook device for recovery of towing bridles attached to drifting tank barges;
 - 5. A line-throwing gun capable of passing a suitable messenger line to a disabled vessel from a distance of at least 100 feet in 40-knot winds.

The Department may at any time require submittal of documentation from the Contractor verifying specifications for each State-provided Tugboat Escort used to provide services under the contract. The Contractor of a State-provided Tugboat Escort shall allow the Department or its authorized representative to board each such vessel at any time for the purpose of verifying vessel specifications.

(4) State-provided Tugboat Escort Manning Requirements. The crew of a State-provided Tugboat Escort shall include, at a minimum:

- (a) A master holding the appropriate U.S. Coast Guard license or documentation sufficient for the tonnage and service in Buzzards Bay required by 314 CMR 19.00, and a valid endorsement as radar observer (unlimited), valid on all waters;
- (b) A mate holding the appropriate U.S. Coast Guard license or documentation sufficient for the tonnage and service in Buzzards Bay required by 314 CMR 19.00, and a valid endorsement as radar observer (unlimited), valid on all waters;
- (c) An able seaman holding the appropriate U.S. Coast Guard documentation sufficient for the tonnage and service in Buzzards Bay required by 314 CMR 19.00; and
- (d) An engineer holding the appropriate U.S. Coast Guard license for the type of propulsion and horsepower of the State-provided Tugboat Escort required by 314 CMR 19.00.

(5) The State-provided Tugboat Escort shall, while operating in Buzzards Bay, follow all guidelines in the Buzzards Bay VMRS Users Manual, as may be amended from time to time, and comply with all applicable requirements as defined by 33 CFR 165.100 and 33 CFR 207.20(a).

(6) Pre-escort Conference. Prior to commencing an escorted transit, the State-provided Tugboat Escort shall, if possible, contact the Target Vessel master to confirm the position of the Target Vessel, establish the radio frequency to be used and the anticipated direction of movement and destination of the Target Vessel, and exchange other pertinent information that the State-provided Tugboat Escort captain and the Target Vessel master deem necessary to facilitate operations in the case of an unplanned event.

19.07: Reporting Requirements

- (1) The Contractor shall report to the Commissioner all near and actual navigational incidents that could potentially lead to a release of oil into Waters of the Commonwealth, in accordance with the requirements set forth in 310 CMR 19.07(2).
- (2) The Contractor shall prepare and submit to the Department on a monthly basis a Monthly Buzzards Bay Tank Vessel Movement Monitoring Report, on a form established by the Department for such purpose. The Tank Vessel Movement Monitoring Report for the preceding month shall be submitted to the Department by the 15th of each month. The report shall include the following:
 - (a) A log of all Buzzards Bay Tank Vessel transits as recorded through the Vessel Movement Monitoring System including:
 1. vessel specifics (name, flag, cargo, and size);
 2. identity of vessel master;
 3. dates and times of entry into and exit from Buzzards Bay; and
 4. route of transit through Buzzards Bay.
 - (b) A summary of all near or actual Tank Vessel navigational incidents as observed through the Vessel Movement Monitoring System or first hand report of State-provided Tugboat Escort crew member(s) including:
 1. vessels traveling outside the designated vessel route as appearing on the National Oceanic and Atmospheric Administration chart for Buzzards Bay;
 2. failure to use AIS;
 3. near or actual collisions, allisions or groundings;
 4. steering or engine failures; and
 5. towing gear failures.
 - (c) The date, time, vessel, identity of the vessel master and incident description for each navigational incident reported.

REGULATORY AUTHORITY

314 CMR 19.00: St. 2009, c. 101.

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