

314 CMR: DIVISION OF WATER POLLUTION CONTROL

314 CMR 9.00: 401 WATER QUALITY CERTIFICATION FOR DISCHARGE OF DREDGED OR FILL MATERIAL, DREDGING, AND DREDGED MATERIAL DISPOSAL IN WATERS OF THE UNITED STATES WITHIN THE COMMONWEALTH

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9.01: Authority, Jurisdiction, and Purpose

(1) Authority. 314 CMR 9.00 is adopted pursuant to § 27 of the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26 through 53 and establishes procedures and criteria for the administration of Section 401 of the federal Clean Water Act, 33 U.S.C. 1251 *et seq.*, for the discharge of dredged or fill material, dredging, and dredged material disposal in waters of the United States within the Commonwealth. 314 CMR 9.07 is also adopted pursuant to M.G.L. c. 21A § 14; M.G.L. c. 21C; M.G.L. c. 21E; M.G.L. 21H; M.G.L. c. 91, §§ 52 through 56; and M.G.L. c. 111, §§ 150A through 150A½ relative to upland reuse and disposal of dredged materials.

(2) Jurisdiction. 314 CMR 9.00 applies to the discharge of dredged or fill material, dredging, and dredged material disposal activities in waters of the United States within the Commonwealth which require federal licenses or permits and which are subject to state water quality certification under 33 U.S.C. 1251, *et seq.*. The federal agency issuing a permit initially determines the scope of geographic and activity jurisdiction. (*e.g.* the Corps of Engineers for Section 404 permits for the discharge of dredged or fill material). 314 CMR 9.07 also applies to any dredging project and the management of dredged material within the marine boundaries and at upland locations within the Commonwealth.

(3) Purpose. 314 CMR 9.00 is promulgated by the Department to carry out its statutory obligations to certify that proposed discharges of dredged or fill material, dredging, and dredged material disposal in waters of the United States within the Commonwealth will comply with the Surface Water Quality Standards and other appropriate requirements of state law. 314 CMR 9.00 implements and supplements the Surface Water Quality Standards at 314 CMR 4.00 and is a requirement of state law under 33 U.S.C. 1251, *et seq.* 314 CMR 9.00 implements and supplements 314 CMR 4.00 by, without limitation:

- (a) protecting the public health and restoring and maintaining the chemical, physical, and biological integrity of the water resources of the Commonwealth by establishing requirements, standards, and procedures for the following:
  - 1. monitoring and control of activities involving discharges of dredged or fill material, dredging, and dredged material disposal or placement;
  - 2. the evaluation of alternatives for dredging, discharges of dredged or fill material, and dredged material disposal or placement; and
  - 3. public involvement regarding dredging, discharges of dredged or fill material, and dredged material placement, reuse or disposal.
- (b) establishing a certification program for the Department to persons seeking to discharge dredged or fill material, conduct dredging, and place, reuse or dispose of dredged material.

9.02: Definitions

Activity. Any proposed project, scheme or plan of action which will result in a discharge of dredged or fill material subject to jurisdiction under 33 U.S.C. 1251, *et seq.* or dredging and dredged material management. In determining thresholds for and conducting evaluations of applications, the entirety of the activity, including likely future expansions, shall be considered and not separate phases or segments thereof. The activity includes temporary and permanent, direct and indirect, and cumulative impacts from the construction and ongoing operation of a project. The calculation of square footage shall include the total of the applicable areas proposed to be lost from the impacts of the activity, without reduction for replication or restoration.

Aggrieved Person. Any person who, because of a 401 Water Quality Certification determination by the Department, may suffer an injury in fact which is different either in kind or magnitude from that suffered by the general public and which is within the scope of interests identified in 314 CMR 9.00.

Applicant. A person proposing any activity that will result in a discharge of dredged or fill material, or a discharge from dredging or dredged material disposal in any water of the United States within the Commonwealth.

Aquatic Ecosystem. Waters of the United States within the Commonwealth, including wetlands, that serve as habitat for interrelated and interacting communities and populations of plants and animals.

Area of Critical Environmental Concern. An area designated by the Secretary pursuant to M.G.L. c. 21A, § 2 (7) and 301 CMR 12.00.

Bordering Vegetated Wetlands. Any land or surface area so defined by the Massachusetts Wetlands Protection Act, M.G.L. c. 131, § 40 and 310 CMR 10.55(2).

Clean Water Act. The federal statute at 33 U.S.C. 1251 *et seq.* which contains §§ 401 and 404.

Cold-water Fisheries. Waters in which the mean of the maximum daily temperature over a seven day period generally does not exceed 68°F (20°C) and, when other ecological factors are favorable (such as habitat), are capable of supporting a year round population of cold-water stenothermal aquatic life. Waters designated as cold-water fisheries by the Department in 314 CMR 4.00 and water designated as cold-water fishery resources by the Division of Fisheries and Wildlife are cold-water fisheries. Waters where there is evidence based on a fish survey that a cold-water fishery and habitat exist are also cold-water fisheries. Cold-water fish include but are not limited to brook trout (*Salvelinus fontinalis*), rainbow trout (*Oncorhynchus mykiss*), brown trout (*Salmo trutta*), creek chubsucker (*Erimyzon oblongus*), and fallfish (*Semotilus corporalis*).

Confined Aquatic Disposal (CAD). A subaqueous facility (typically a constructed cell or natural depression) into which dredged sediment is placed and then isolated from the surrounding environment.

Confined Disposal Facility (CDF). A facility created in open water or wetlands consisting of confinement walls or berms built up against or extending into existing land.

Corps of Engineers. The United States Army Corps of Engineers, New England Division.

Critical Area. Outstanding Resources Waters as designated in 314 CMR 4.00, Special Resource Waters as designated in 314 CMR 4.00, recharge areas for public water supplies as defined in 310 CMR 22.02 (Zone Is, Zone IIs and Interim Wellhead Protection Areas for ground water sources and Zone As for surface water sources), bathing beaches as defined in 105 CMR 445.000, cold-water fisheries, and shellfish growing areas.

Department. The Massachusetts Department of Environmental Protection.

9.02: continued

Discharge of Dredged or Fill Material. Any addition of dredged or fill material into, including any redeposit of dredged material within, waters of the United States within the Commonwealth. The term includes, but is not limited to:

- (a) direct placement of fill, including any material used for the primary purpose of replacing with dry land or of changing the bottom elevation of a wetland or water body,
- (b) runoff from a contained land or water disposal area, and
- (c) the placement of pilings when it has the effect of fill material.

Disposal Site. A structure, well, pit, pond, lagoon, impoundment, ditch, landfill or other place or area, excluding ambient air or surface water, where uncontrolled oil or hazardous material has come to be located as a result of any spilling, leaking, pouring, ponding, emitting, emptying, discharging, injecting, escaping, leaching, dumping, discarding, or otherwise disposing of such oil or hazardous material and is a “disposal site” as defined in M.G.L.c. 21E.

Dredged Material. Sediment and associated materials that are moved from below the mean high tide line for coastal waters and below the high water mark for inland waters during dredging activities.

Dredged Material Disposal. The transport, placement, or deposition of sediments or other material after dredging.

Dredging - The removal or repositioning of sediment or other material from below the mean high tide line for coastal waters and below the high water mark for inland waters. Dredging shall not include activities in bordering or isolated vegetated wetlands.

Environmental Impact Report. The report described in the Massachusetts Environmental Policy Act, M.G.L. c. 30, §§ 61 through 62H and regulations at 301 CMR 11.00.

Environmental Monitor. The publication described in 301 CMR 11.19(1).

Environmentally Sensitive Site Design. Design that incorporates low impact development techniques to prevent the generation of stormwater and non-point source pollution by reducing impervious surfaces, disconnecting stormwater sheet flow paths, and treating stormwater at its source, maximizing open space, minimizing disturbance, protecting natural features and processes, and/or enhancing wildlife habitat.

Fastland. Land above mean high water formed by the placement of dredged or fill material into waters of the United States within the Commonwealth.

Final Order of Conditions. The Order of Conditions issued by the Commissioner of the Department after an adjudicatory hearing or, if no request for a hearing has been filed, the Superseding Order or, if no request for a Superseding Order has been filed, the Order of Conditions issued under the Wetlands Protection Act and 310 CMR 10.05.

Ground Water. Water below the land surface in a saturated zone including perched ground water.

High Water Mark. The present arithmetic mean of high water heights observed over a one-year period using the best available data as determined by the Department.

Illicit Discharge. Discharge that is not entirely comprised of stormwater. Notwithstanding the foregoing, an illicit discharge does not include discharges from the following activities or facilities: firefighting, water line flushing, landscape irrigation, uncontaminated ground water, potable water sources, foundation drains, air conditioning condensation, footing drains, individual resident car washing, flows from riparian habitats and wetlands, dechlorinated water from swimming pools, water used for street washing and water used to clean residential buildings without detergents.

9.02: continued

Improvement Dredging. Any dredging in an area which has not been previously dredged or which extends the original dredged width, depth, length or otherwise alters the original boundaries of a previously dredged area.

Intermediate Facility. A site or location that is to be utilized, on either a project-specific temporary or permanent basis, to manage dredged material prior to its ultimate reuse or disposal (*e.g.*, barge unloading, stockpiling or storage, dewatering, processing or treatment, truck or train loading or unloading).

Isolated Vegetated Wetlands. Vegetated areas subject to jurisdiction under 33 U.S.C. 1251, *et seq.* that are not bordering vegetated wetlands subject to jurisdiction under M.G.L. c. 131, § 40 and 310 CMR 10.55(2).

Land Uses with Higher Potential Pollutant Loads. Land uses identified in 310 CMR 22.20B(2), 310 CMR 22.20C(2)(a) through (k) and (m), 310 CMR 22.21(2)(a)(1) through (8), and 310 CMR 22.21(2)(b)(1) through (6); areas within a site that are the location of activities that are subject to an individual National Pollutant Discharge Elimination System (NPDES) Permit or the NPDES Multi-Sector General Permit; auto fueling facilities (gas stations); exterior fleet storage areas; exterior vehicle service and equipment cleaning areas; marinas and boatyards; parking lots with high intensity use; confined disposal facilities, and disposal sites.

Lot. An area of land in one ownership, with definite boundaries.

Low Impact Development Techniques. Innovative stormwater management systems that are modeled after natural hydrologic features. Low impact development techniques manage rainfall at the source using uniformly distributed decentralized micro-scale controls. Low impact development techniques use small cost-effective landscape features located at the lot level.

Maintenance Dredging. Dredging in accordance with a valid license or permit in any previously authorized dredged area, which does not extend the originally dredged depth, width or length.

Massachusetts Environmental Policy Act or MEPA. M.G.L. c. 30, §§ 61 through 62H and regulations at 301 CMR 11.00.

Massachusetts Oil and Hazardous Materials Release Prevention and Response Act or Chapter 21E. M.G.L. c. 21E, §§ 1 through 18 and implementing regulations at 310 CMR 40.0000, the Massachusetts Contingency Plan (MCP).

Mean High Tide Line. – The line where the arithmetic mean of the high water heights observed over a specific 19-year metonic cycle (the National Tidal Datum Epoch) meets the shore and shall be determined using hydrographic survey data of the National Ocean Survey of the U.S. Department of Commerce.

Mixing Zone. A mixing zone is the limited volume of water allowing for the initial dilution of a discharge, *e.g.*, from dredging or disposal in waters.

National Environmental Policy Act or NEPA. 42 U.S.C. §§ 4321 through 4345.

Non-invasive Sampling Activities. Sampling activities, which include the collection of water, soil or sediment samples by techniques (*e.g.*, hand-held augers) that will not significantly disturb existing wetland resources areas as defined in the Massachusetts Wetland Protection Act and the Federal Clean Water Act.

Notice of Intent. The document described in 310 CMR 10.05(4).

Oil and Hazardous Material (OHM). The definitions included in 310 CMR 40.0000.

Outstanding Resource Water. A surface water of the Commonwealth so designated in the Massachusetts Surface Water Quality Standards at 314 CMR 4.00.

9.02: continued

Person. Any agency or political subdivision of the Commonwealth or the federal government, public or private corporation or authority, individual, partnership or association, or other entity, including any officer of a public or private agency or organization.

Qualified Environmental Professional (QEP). An individual who is knowledgeable about the procedures and methods for characterizing dredged material and contaminated media; is familiar with Massachusetts and federal regulations applicable to the management of such materials; performs or oversees the management of sediment and/or contaminated soil as an integral part of his or her professional duties; and is professionally licensed or certified in a discipline related to environmental assessment (*i.e.*, engineering, geology, or soil science) by the state or a recognized professional organization.

Rare and Endangered Species Habitat. Areas identified as habitat for rare or endangered species by the Massachusetts Division of Fisheries and Wildlife's Natural Heritage Program as published in the Massachusetts Natural Heritage Atlas at the time an application is submitted.

Real Estate Subdivision. The division of a tract of land into two or more lots, including division where approval is required and where approval is not required under the Subdivision Control Law, M.G.L. c.41, §§ 81K through 81GG.

Redevelopment. For purposes of the Stormwater Management Standards as provided in 314 CMR 9.06(6)(a) through (e), redevelopment is defined to include the following projects:

- (a) maintenance and improvement of existing roadways including widening less than a single lane, adding shoulders, correcting substandard intersections, improving existing drainage systems and repaving;
- (b) development, rehabilitation, expansion and phased projects on previously developed sites provided the redevelopment results in no net increase in impervious area; and
- (c) remedial projects specifically designed to provide improved stormwater management such as projects to separate storm drains and sanitary sewers and stormwater retrofit projects.

Salt Marsh. A coastal wetland as defined in M.G.L. c. 131, § 40 and 310 CMR 10.32(2).

SARA 312 Generator. A facility that is required by the Emergency Planning and Community right to Know Act (EPCRA) also known as Title III of the Superfund Amendments and Reauthorization Act of 1989 (SARA Title III) to submit an inventory of the location of hazardous chemicals which are located at the site.

Sediment. All inorganic or organic matter, including detritus, situated under tidal waters below the mean high water line as defined in 310 CMR 10.23; and for inland waters below the upper boundary of a bank, as defined in 310 CMR 10.54(2), which abuts and confines a water body.

Secretary. The Secretary of the Executive Office of Environmental Affairs.

Shellfish Growing Area. Land under the ocean, tidal flats, rocky intertidal shores and marshes and land under salt ponds when any such land contains shellfish. Shellfish growing areas include land that has been identified and shown on a map published by the Division of Marine Fisheries as a shellfish growing area including any area identified on such map as an area where shellfish harvesting is prohibited. Shellfish growing areas shall also include land designated by the Department in 314 CMR 4.00 as suitable for shellfish harvesting with or without depuration. In addition, shellfish growing areas shall include shellfish growing areas designated by the local shellfish constable as suitable for shellfishing based on the density of shellfish, the size of the area, and the historical and current importance of the area for recreational and commercial shellfishing.

Single and Complete Project. The total project proposed or accomplished by one or more persons, including any multiphased activity.

9.02: continued

Special Aquatic Sites means those site identified in Subpart E of 40 CFR Part 230, 404(b)(1), including sanctuaries and refuges, wetlands, mud flats, vegetated shallows, coral reefs, and riffle and pool complexes. They are geographical areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region.

Stormwater Best Management Practice. Structural or nonstructural technique for managing stormwater to prevent or reduce non-point source pollutants from entering surface waters or ground waters. A structural stormwater best management practice includes a basin, discharge outlet, swale, rain garden, filter, or other stormwater treatment practice or measure either alone or in combination including without limitation any overflow pipe, conduit or weir control structure that:

- (a) is not naturally occurring;
- (b) is not designed as a wetland replication area; and
- (c) has been designed, constructed and installed for the purpose of collecting, storing, discharging, recharging or treating stormwater.

Nonstructural stormwater best management practices include source control and pollution prevention measures.

Stormwater Management System. System for conveying, collecting, storing, discharging, recharging or treating stormwater on-site including stormwater best management practices and any pipes and outlets intended to transport and discharge stormwater to the ground water, a surface water or a municipal separate storm sewer system.

Surface Waters. All waters other than groundwaters within the jurisdiction of the Commonwealth, including, without limitation, rivers, streams, lakes, ponds, springs, impoundments, estuaries, wetlands, coastal waters, and vernal pools.

Vernal Pool. A waterbody that has been certified by the Massachusetts Division of Fisheries and Wildlife as a vernal pool. In the event of a conflict of opinion or the lack of a clear boundary delineation certified by the Division of Fisheries and Wildlife or the Department, the applicant may submit an opinion certified by a registered professional engineer, supported by engineering calculations, as to the boundary of the vernal pool. The maximum extent of the waterbody shall be based upon the total volume of runoff from the drainage area contributing to the vernal pool and shall be further based upon a design storm of 2.6 inches of precipitation in 24 hours.

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

9.02: continued

Waters of the United States within the Commonwealth. Navigable or interstate waters and their tributaries, adjacent wetlands, and other waters or wetlands within the borders of the Commonwealth where the use, degradation, or destruction could affect interstate or foreign commerce as determined by the Corps of Engineers. Bordering and isolated vegetated wetlands and land under water are waters of the United States within the Commonwealth when they meet the federal jurisdictional requirements defined at 33 CFR 328 through 329.

Water-dependent. Uses and facilities which require direct access to, or location in, marine, tidal or inland waters and which therefore cannot be located away from those waters, including any uses and facilities defined as water-dependent in 310 CMR 9.00.

401 Water Quality Certification or Certification. The document issued by the Department to the applicant and the appropriate federal agency under 33 U.S.C. 1251, *et seq.*, M.G.L. c. 21, § 27 and 314 CMR 9.00 certifying, conditioning, or denying an activity.

Wetlands Protection Act. M.G.L. c. 131, § 40 and regulations at 310 CMR 10.00.

9.03: Activities Not Requiring an Application

The activities identified in 314 CMR 9.03(1) through (6) do not require an individual 401 Water Quality Certification application provided the specified conditions are met. The Department has certified these activities through its certification of the Corps of Engineers' Programmatic General Permit (PGP) for Massachusetts effective January 20, 2005.

(1) Less than 5000 sq. ft. with an Order of Conditions. Activities conducted in compliance with the Wetlands Protection Act and receiving a Final Order of Conditions which meets all applicable performance standards under 310 CMR 10.00, provided that:

- (a) the Final Order of Conditions permits work that results in the loss of up to 5,000 square feet cumulatively of bordering and isolated vegetated wetlands and land under water. Both bordering and isolated vegetated wetlands must be delineated on the plans contained in the Notice of Intent and described on a form prescribed by the Department; and
- (b) the Final Order of Conditions includes conditions requiring at least 1:1 replacement of bordering vegetated wetlands under 310 CMR 10.55(4)(b);
- (c) if applicable, the activity conforms to the Waterways Crossing requirements at General Condition 21 in the Programmatic General Permit (PGP); and
- (d) the proposed work is not subject to 314 CMR 9.04.

(2) Beach Nourishment. Beach nourishment activities with a Final Order of Conditions issued under M.G.L. c. 131, § 40.

(3) Dredging Less than 100 c.y. Dredging and dredged material disposal of less than 100 cubic yards, provided that a Final Order of Conditions has been issued and the proposed work is not subject to 314 CMR 9.04 and the work qualifies for Category One of the Programmatic General Permit (PGP). Dredged sediment generated from such activities shall be managed in accordance with the provisions of 314 CMR 9.07(9), (10), and (11) and may be used for beach nourishment activities or reuse within the shoreline under a Final Order of Conditions issued under M.G.L. c. 131, § 40.

(4) Agriculture or Aquaculture Exempt under the Wetlands Protection Act. Normal maintenance and improvement of land in agricultural or aquacultural use that is exempt from the Wetlands Protection Act, as defined and performed in accordance with 310 CMR 10.04 (Agriculture) including the alternatives analysis, as applicable, performed by the Natural Resources Conservation Service (formerly Soil Conservation Service) or 310 CMR 10.04 (Aquaculture). The provisions of 314 CMR 9.04 do not apply.

## 9.03: continued

(5) Less than 5000 sq. ft. of Isolated Vegetated Wetlands. Any activity in an area not subject to jurisdiction of the Wetlands Protection Act which is subject to 33 U.S.C. 1251, *et seq.* (*i.e.*, isolated vegetated wetlands) which will result in the loss of up to 5000 square feet cumulatively of bordering and isolated vegetated wetlands and land under water, provided there is no discharge of dredged or fill material to any habitat for rare and endangered species or to any Outstanding Resource Water.

(6) Planning and Design Activities. Activities that are temporary in nature, have negligible impacts, and are necessary for planning and design purposes such as the installation of monitoring wells, exploratory borings, sediment sampling, and surveying. The applicant shall notify the Department and conservation commission at least ten days prior to commencing the activity. Notification is not required if a valid, unexpired Final Negative Determination of Applicability has been issued for the work as described 310 CMR 10.05(3)(b). Notification shall include a description of the activity, the location of the proposed activity and measures to be taken to avoid or minimize impacts. The site shall be substantially restored to its condition prior to the activity.

The Department will notify the persons to whom an Order of Conditions is issued not later than ten business days of its receipt by the Department that based on the information available to the Department the criteria of 314 CMR 9.03 have not been met. If the impacts to resource areas, as defined in the Massachusetts Wetland Protection Act and the Federal Clean Water Act, or the project size increases from the description filed with the Notice of Intent, or there are any inaccuracies therein, the applicant must notify the Department in writing and request a determination that the criteria of 314 CMR 9.03 have been met before the activity begins.

9.04: Activities Requiring an Application

The activities identified in 314 CMR 9.04(1) through (11) require a 401 Water Quality Certification application and are subject to the Criteria for Evaluation of Applications for the Discharge of Dredged or Fill Material in 314 CMR 9.06 and/or 314 CMR 9.07:

(1) More than 5000 sq. ft. Any activity in an area subject to 310 CMR 10.00 which is also subject to 33 U.S.C. 1251, *et seq.* and will result in the loss of more than 5000 square feet cumulatively of bordering and isolated vegetated wetlands and land under water.

(2) Outstanding Resource Waters. Dredging in, or any activity resulting in any discharge of dredged or fill material to any Outstanding Resource Water.

(3) Real Estate Subdivision - Any discharge of dredged or fill material associated with the creation of a real estate subdivision, unless there is a valid, unexpired Final Order of Conditions, followed by a Certificate of Compliance, and a recorded deed restriction providing notice to subsequent purchasers limiting the amount of fill for the single and complete project to less than 5000 square feet cumulatively of bordering and/or isolated vegetated wetlands and land under water and the discharge is not to an Outstanding Resource Water. Real estate subdivisions include divisions where approval is required and where approval is not required under the Subdivision Control Law, M.G.L. c. 41, §§ 81K through 81GG. Discharges of dredged or fill material to create the real estate subdivision include but are not limited to discharges resulting from the construction of roads, drainage, sidewalks, sewer systems, buildings, septic systems, wells, and accessory structures.

(4) Activities Exempt under M.G.L. c. 131, § 40. Any activity not subject to M.G.L. c. 131, § 40 and which is subject to 33 U.S.C. 1251, *et seq.* and will result in any discharge of dredged or fill material to bordering vegetated wetlands or land under water.

(5) Routine Maintenance. Routine maintenance of existing channels, such as mosquito control projects or road drainage maintenance, that will result in the annual loss of more than 5000 square feet cumulatively of bordering and isolated vegetated wetland and land under water will be evaluated under the criteria of 314 CMR 9.06. A single application may be submitted and a single certification may be issued for repeated routine maintenance activities on an annual or multi-year basis not to exceed five years.



9.04: continued

- (6) More than 5000 sq. ft. of Isolated Vegetated Wetlands. Any activity in an area not subject to jurisdiction of M.G.L. c. 131, § 40 but which is subject to 33 U.S.C. 1251, *et seq.* (*i.e.*, isolated vegetated wetlands) and which will result in the loss of more than 5000 square feet cumulatively of bordering and isolated vegetated wetlands and land under water.
- (7) Rare and Endangered Species Habitat in Isolated Vegetated Wetlands. Any activity resulting in the discharge of dredged or fill material to an isolated vegetated wetland that has been identified as habitat for rare and endangered species.
- (8) Salt Marsh. Any activity resulting in the discharge of dredged or fill material in any salt marsh.
- (9) Individual 404 Permit. Any activity subject to an individual Section 404 permit by the Corps of Engineers.
- (10) Agricultural Limited Project. Agricultural work, not exempt under M.G.L. c. 131, § 40, referenced in and performed in accordance with 310 CMR 10.53(5). Provided the activity does not result in any discharge of dredged or fill material to an Outstanding Resource Water, such work will be presumed to meet the criteria of 314 CMR 9.06 where a comparable alternatives analysis is performed or approved by the Natural Resources Conservation Service (formerly Soil Conservation Service) and included in the Notice of Intent.
- (11) Discretionary Authority. Any activity where the Department invokes discretionary authority to require an application based on cumulative effects of multiphased activities, cumulative effects of dredging, or from the discharge of dredged or fill material to bordering or isolated vegetated wetlands or land under water, or other impacts which may jeopardize water quality. The Department will issue a written notice of and statement of reasons for its determination to invoke this discretionary authority not later than ten business days after its receipt of an Order of Conditions.
- (12) Dredging Greater than 100 cubic yards. Any dredging or dredged material disposal of more than 100 cubic yards not meeting the requirements of 314 CMR 9.03(3).
- (13) Any activity not listed in 314 CMR 9.03 or 314 CMR 9.04 is an activity requiring an application subject to the requirements of 314 CMR 9.05 and 9.06 through 9.13 as applicable.

9.05: Submission of an Application

(1) Application Requirements. An applicant for 401 Water Quality Certification shall submit an application on the forms in the 401 Water Quality Certification application package currently available from the Department. The application shall be prepared in accordance with instructions contained in the Department's application and submitted to the appropriate address(es). Failure to complete an application where required, to provide additional information by the requested deadline when an application is deficient, to provide public notice in the form specified, to notify other agencies where required, or to submit information for a single and complete project shall be grounds for denial of certification. The applicant has the burden of demonstrating that the criteria of 314 CMR 9.06, 9.07, or 9.08 have been met.

For projects permitted under 314 CMR 9.07, the applicant may request in writing a pre-application meeting with the Department. The Department has the discretion to grant such a request.

9.05: continued

Demonstration or Pilot Projects. Any person who wishes to establish a demonstration or pilot sediment management project, related to activities within the jurisdiction of the 401 Certification, for the purpose of demonstrating the effectiveness and utility of an alternative or innovative management technology shall submit an application to the Department for a demonstration project permit/certification, notify the applicable board(s) of health and conservation commission(s) of the municipality(ies) where the project is proposed and consult with appropriate wildlife and/or fisheries agencies. The Department shall not approve a demonstration or pilot project unless it determines that the project will not cause or contribute to significant pollution of the air, water, or other natural resources of the Commonwealth; the project has merit and seeks to improve operational aspects of dredged materials management, produce significant cost savings, or serves to increase protection of human health and the environment; and, the applicant has provided adequate proof of financial assurance. The Department may approve a demonstration or pilot project for a limited time, with renewal contingent upon satisfactorily achieving project objectives and adequately protecting public health, safety, and the environment.

(2) Fee and Review Schedule. The fee and regulatory review schedule for actions by the Department in the review of a 401 Water Quality Certification application are set forth in the Timely Action Schedule and Fee Provisions at 310 CMR 4.00.

(3) Public Notice of an Application: A public notice of an application for 401 Water Quality Certification shall be published by the applicant within ten days of submitting an application at the applicant's expense in a newspaper of general circulation within the area of the proposed activity, including, as applicable, the area where the following activities will occur: the discharge of dredged or fill material, the dredging activity, the location of any intermediate facilities, the site of any upland or in-water sediment placement. The public notice shall contain:

- (a) the name and address of the applicant and property owner;
  - (b) the location of the proposed activity;
  - (c) a brief description of the activity;
  - (d) the name and address of the person from whom additional information may be obtained;
  - (e) the 21 day time period within which the public may comment;
  - (f) the office and address within the Department to which comments should be addressed;
- and
- (g) a statement that any ten persons of the Commonwealth, any aggrieved person, or any governmental body or private organization with a mandate to protect the environment that has submitted written comments may also appeal the Department's Certification and that failure to submit comments before the end of the public comment period may result in the waiver of any right to an adjudicatory hearing.

A person submitting an application for 401 Water Quality Certification who is also subject to M.G.L. c. 131, § 40, 310 CMR 10.00 and/or M.G.L. c. 91 and 310 CMR 9.00 may provide joint public notice by appending to the notice provided under 310 CMR 10.05(5) or 310 CMR 9.13 a statement that an application for 401 Water Quality Certification is pending before the Department, provided that the joint notice contains the information in 314 CMR 9.05(3)(a) through (g). A person submitting an application for a dredging project shall concurrently file a copy of this public notice with the Board(s) of Health in the community(ies) in which each of the dredging or dredged material management activities, sites and/or facilities is to be located. A person submitting an application for the discharge of dredged or fill material to, or dredging within, an Outstanding Resource Water shall also publish a notice in the *Environmental Monitor*, and the 21 day time period within which the public may comment shall extend from the later of the date of publication of the newspaper or *Environmental Monitor* notice. All written comments providing relevant information shall be considered.

(4) The Department will conduct a site visit, providing notice to the applicant, the conservation commission of the city or town where the activity will occur, and any persons or groups which have submitted written comments prior to the date the site visit is scheduled. If the Department has previously inspected the site prior to issuing a Superseding Order of Conditions, receives no public comments in writing, or otherwise determines a site visit is not necessary or useful to its evaluation, it shall set forth its reasons in writing.

9.06: Criteria for the Evaluation of Applications for Discharge of Dredged or Fill Material

(1) No discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge that would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.

(a) An alternative is practicable if it is available and capable of being done after taking into consideration costs, existing technology, and logistics in light of overall project purposes.

(b) Where the activity associated with the discharge does not require access or proximity to or siting within wetlands and waters to fulfill its basic purpose (*i.e.*, is not "water dependent"), practicable alternatives that do not involve the discharge of dredged or fill material are presumed to be available, unless clearly demonstrated otherwise. In addition, all practicable alternatives to the proposed activity, which do not involve a discharge, are presumed to have less adverse impact on the aquatic ecosystem unless clearly demonstrated otherwise.

(c) The scope of alternatives to be considered shall be commensurate with the scale and purpose of the proposed activity, the impacts of the proposed activity, and the classification, designation and existing uses of the affected wetlands and waters in the Surface Water Quality Standards at 314 CMR 4.00.

1. For activities associated with access for one dwelling unit, the area under consideration for practicable alternatives will be limited to the lot. For activities associated with the creation of a real estate subdivision, the area under consideration will be limited to the subdivided lots and any adjacent lots the applicant formerly owned, presently owns, or can reasonably obtain an ownership interest.

2. For any activity resulting in the loss of more than one acre cumulatively of bordering and isolated vegetated wetlands and land under water, alternative sites not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed will be considered by the Department, but only if such information is required in an Environmental Impact Report or in an alternatives analysis conducted by the Corps of Engineers for an individuals 404 permit.

(2) No discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will avoid and minimize potential adverse impacts to the bordering or isolated vegetated wetlands, land under water or ocean, or the intertidal zone. For discharges to bordering or isolated vegetated wetlands, such steps shall include a minimum of 1:1 restoration or replication. The Department may waive the requirement for 1:1 restoration or replication for projects which will restore or otherwise improve the natural capacity of any wetland or other water of the Commonwealth pursuant to 314 CMR 9.06(8). However, no such project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species as specified in 310 CMR 10.00.

(3) No discharge of dredged or fill material shall be permitted to Outstanding Resource Waters, except for the activities specified in 314 CMR 9.06(3)(a) through (k), which remain subject to an alternatives analysis and other requirements of 314 CMR 9.06 and/or 314 CMR 9.07:

(a) Projects conducted or approved by public or private water suppliers in the performance of their responsibilities and duties to protect the quality of the water in the watersheds, or to maintain, operate and improve the waterworks system, provided that such projects are implemented in accordance with applicable federal and state laws, regulations, and requirements;

(b) Activities determined by the Department to be for the express purpose and intent of maintaining or enhancing the resource for its designated use, after consultation with the entity, if any, with direct control of the water resource or governing water use;

(c) Maintenance, repair, replacement or reconstruction but not substantial enlargement of existing and lawfully located structures or facilities including buildings, roads, railways, utilities and coastal engineering structures;

(d) Where the designation was for public water supply purposes, activities subject to the comprehensive public water supply protection program enacted by the legislature for the Ware, Quabbin, and Wachusett watersheds in the Watershed Protection Act, St. 1992 c. 36 and M.G.L. c. 92. Any activity for which an applicant has been granted a variance by the Department of Conservation and Recreation pursuant to 350 CMR 11.06(3) or for a discharge of dredged or fill material into a tributary that the Department of Conservation and Recreation has exempted pursuant to 350 CMR 11.06(4). A span or other bridging technique shall be considered an alternative in accordance with 314 CMR 9.06(3)(e) and the

## 9.06: continued

Department will consult with the Department of Conservation and Recreation in reviewing the alternatives.

(e) Access for the construction of dwelling units and associated utilities:

1. For the loss of more than 5,000 square feet cumulatively of bordering and isolated vegetated wetland and land under water for access to any number of dwelling units, a span or other bridging technique is presumed to be practicable. New permanent crossings shall conform with the General Standards contained in the latest version of the Massachusetts River and Stream Crossing Standards: Technical Guidelines.

2. For the loss of less than 5,000 square feet cumulatively of bordering and isolated vegetated wetland and land under water for access to any number of dwelling units, an embedded culvert, span or other bridging technique is presumed to be practicable. New permanent crossings shall conform with the General Standards contained in the most recent version of the Massachusetts River and Stream Crossing Standards: Technical Guidelines.

These presumptions may be overcome upon a showing of credible evidence that based on site considerations, impact on the resource, or cost considerations, a span or other bridging technique is or is not practicable.

(f) Construction of utilities, public or private roadways or other access except as specified in 314 CMR 9.06(3)(e), railroad track and rail beds and facilities directly related to their operation. These activities require use of a span or other bridging technique, unless the Department determines, based on information contained in a Department 401 alternatives analysis, a Corps of Engineers Section 404 alternatives analysis, or an Environmental Impact Report and the Secretary's certificate, that this alternative is not practicable, would not have less adverse impact on the aquatic ecosystem, or would have other significant adverse environmental consequences.

(g) Operations to clean up, prevent, assess, monitor, contain, or mitigate releases of hazardous materials or wastes, including landfill closures and activities undertaken in accordance with M.G.L. c. 21E and 310 CMR 40.0000.

(h) Projects which have received a variance under 314 CMR 9.08 or under 310 CMR 10.36 or 310 CMR 10.58 where consideration has been given to the Outstanding Resource Water designation in the variance analysis.

(i) Access to land in agricultural or aquacultural use, of a nature suitable to the use as defined in 310 CMR 10.04: Agriculture;Aquaculture.

(j) Operations to clean up, prevent, assess, monitor, contain, or mitigate releases of oil or hazardous materials or wastes, including landfill closures under M.G.L. c. 111, §150A-150A½ and 310 CMR 16.00 and 19.000 and activities undertaken in accordance with M.G.L. c. 21E and 310 CMR 40.0000.

(k) Maintenance, repair, replacement, or reconstruction of structures or facilities for water-dependent uses. In addition, the enlargement of structures or facilities for water-dependent uses is allowed only in following limited circumstances:

1. in an Outstanding Resource Water that is designated for purposes other than a public water supply; or
2. in an Outstanding Resource Water that is located within an Area of Critical Environmental Concern if the Department determines that the enlargement of structures or facilities for water-dependent uses is consistent with a resource management plan for the ACEC that has been adopted by the municipality and approved by the Secretary, provided, however, that any fill or structure associated with the enlargement activity is located entirely within an area of previously filled tidelands.

(4) Discharge of dredged or fill material to an Outstanding Resource Water specifically identified in 314 CMR 4.06(1)(d) (*e.g.*, vernal pools, within 400 feet of a water supply reservoir and any other areas so designated) is prohibited as provided therein unless a variance is obtained under 314 CMR 9.08.

(5) No discharge of dredged or fill material is permitted for the impoundment or detention of stormwater for purposes of controlling sedimentation or other pollutant attenuation. Discharge of dredged or fill material may be permitted to manage stormwater for flood control purposes only where there is no practicable alternative and provided that best management practices are implemented to prevent sedimentation or other pollution. No discharge of dredged or fill material is permitted for the impoundment or detention of stormwater in Outstanding Resource Waters for any purpose.

## 9.06: continued

- (6) (a) Except as otherwise provided in 314 CMR 9.06, stormwater discharges shall be provided with best management practices to attenuate pollutants and to provide a setback from the receiving water or wetlands in accordance with the following Stormwater Management Standards as further defined and specified in the Massachusetts Stormwater Handbook:
1. No new stormwater conveyances (*e.g.* outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.
  2. Stormwater management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates. This Standard may be waived for land subject to coastal storm flowage as defined in 310 CMR 10.04.
  3. Loss of annual recharge to ground water shall be eliminated or minimized through the use of infiltration measures including environmentally sensitive site design, low impact development techniques, stormwater best management practices, and good operation and maintenance. At a minimum, the annual recharge from the post-development site shall approximate the annual recharge from pre-development conditions based on soil type. This Standard is met when the stormwater management system is designed to infiltrate the required recharge volume as determined in accordance with the Massachusetts Stormwater Handbook.
  4. Stormwater management systems shall be designed to remove 80% of the average annual post-construction load of Total Suspended Solids (TSS). This Standard is met when:
    - a. Suitable practices for source control and pollution prevention are identified in a long-term pollution prevention plan and thereafter are implemented and maintained;
    - b. Structural stormwater best management practices are sized to capture the required water quality volume determined in accordance with the Massachusetts Stormwater Handbook; and
    - c. Pretreatment is provided in accordance with the Massachusetts Stormwater Handbook.
  5. For land uses with higher potential pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable. If through source control and/or pollution prevention all land uses with higher potential pollutant loads cannot be completely protected from exposure to rain, snow, snow melt and stormwater runoff, the proponent shall use the specific structural stormwater BMPs determined by the Department to be suitable for such use as provided in the Massachusetts Stormwater Handbook. Stormwater discharges from land uses with higher potential pollutant loads shall also comply with the requirements of the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26 through 53, and the regulations promulgated thereunder at 314 CMR 3.00, 314 CMR 4.00 and 314 CMR 5.00.
  6. Stormwater discharges within the Zone II or Interim Wellhead Protection Area of a public water supply and stormwater discharges near or to any other critical area require the use of the specific source control and pollution prevention measures and the specific structural stormwater best management practices determined by the Department to be suitable for managing discharges to such area as provided in the Massachusetts Stormwater Handbook. A discharge is near a critical area, if there is a strong likelihood of a significant impact occurring to said area, taking into account site-specific factors. Stormwater discharges to Outstanding Resource Waters and Special Resource Waters shall be removed and set back from the receiving water or wetland and receive the highest and best practical method of treatment. A “storm water discharge” as defined in 314 CMR 3.04(2)(a)1. or (b) to an Outstanding Resource Water or Special Resource Water shall comply with 314 CMR 3.00 and 314 CMR 4.00. Stormwater discharges to a Zone I or Zone A are prohibited, unless essential to the operation of the public water supply.
  7. A redevelopment project is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural stormwater best management practice requirements of Standards 4, 5, and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the Stormwater Management Standards and improve existing conditions.

## 9.06: continued

8. A plan to control construction related impacts including erosion, sedimentation and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation and pollution prevention plan) shall be developed and implemented.

9. A long-term operation and maintenance plan shall be developed and implemented to ensure that the stormwater management system functions as designed.

10. All illicit discharges to the stormwater management system are prohibited.

(b) The Stormwater Management Standards set forth in 314 CMR 9.06(6)(a)1. through 10. shall not apply to:

1. A single -family house;
2. Housing development and redevelopment projects comprised of detached single-family dwellings with four or fewer lots provided that there are no stormwater discharges that may affect a critical area;
3. Multi- family housing development and redevelopment projects, with four or fewer units, including condominiums, cooperatives, apartment buildings, and townhouses, provided that there are no stormwater discharges that may potentially affect a critical area; and
4. Emergency repairs to roads or drainage systems.

(c) The Stormwater Management Standards shall apply to the maximum extent practicable to the following:

1. Housing development and redevelopment projects comprised of detached single-family dwellings with four or fewer lots that have a stormwater discharge that may potentially affect a critical area;
2. Multi-family housing development and redevelopment projects with four or fewer units, including condominiums, cooperatives, apartment buildings and townhouses, that have a stormwater discharge may potentially affect a critical area;
3. Housing development and redevelopment projects comprised of detached single-family dwellings, with five to nine lots, provided there is no stormwater discharge that may potentially affect a critical area; and
4. Multi-family housing development and redevelopment projects of five to nine units, including condominiums, cooperatives, apartment buildings, and townhouses, provided there is no stormwater discharge that may potentially affect a critical area.
5. Marinas and boatyards provided that the hull maintenance, painting, and service areas are protected from exposure to rain, snow, snow melt, and stormwater runoff; and
6. Footpaths, bikepaths and other paths for pedestrian and/or nonmotorized access.

(d) For phased projects the determination of whether the Stormwater Management Standards apply is made on the single and complete project including all phases. When proposing a development or redevelopment project subject to the Stormwater Management Standards, proponents shall consider environmentally sensitive site design that incorporates low impact development techniques in addition to stormwater best management practices.

(e) Project proponents seeking to demonstrate compliance with some or all of the Stormwater Management Standards to the maximum extent practicable shall demonstrate that:

1. They have made all reasonable efforts to meet each of the standards;
2. They have made a complete evaluation of possible stormwater management measures including environmentally sensitive site design and low impact development techniques that minimize land disturbance and impervious surfaces, structural stormwater best management practices, pollution prevention, erosion and sedimentation control and operation and maintenance of stormwater best management practices; and
3. If full compliance with the Standards cannot be achieved, they are implementing the highest practicable level of treatment.

## 9.06: continued

(f) Compliance with the Stormwater Management Standards set forth in 314 CMR 9.06(6)(a) to the extent that they are applicable in accordance with 314 CMR 9.06(6)(b), (c) and (d) does not relieve a discharger of the obligation to comply with all applicable Federal, State and local laws, regulations, and permits including without limitation all applicable provisions of 310 CMR 10.00, 314 CMR 3.00, 314 CMR 4.00, 314 CMR 9.00, local land use controls adopted to comply with 310 CMR 22.21 or the NPDES General Permit for Small Municipal Separate Storm Sewer Systems, and the terms and conditions of NPDES General Stormwater Permits such as the Construction General Permit and the Multi-Sector General Permit.

(7) No discharge of dredged or fill material shall be permitted in the rare circumstances where the activity meets the criteria for evaluation but will result in substantial adverse impacts to the physical, chemical, or biological integrity of surface Waters of the Commonwealth.

(8) Notwithstanding the provisions of 314 CMR 9.06(1) through (7), the Department may allow a project which will restore or otherwise improve the natural capacity of any wetland or other water of the Commonwealth. Such projects include, but are not limited to, dam removal, salt marsh restoration, stream restoration, nutrient management, control or removal of aquatic nuisance vegetation, or vegetation management to improve wildlife habitat.

9.07: Criteria for the Evaluation of Applications for Dredging and Dredged Material Management(1) General.

(a) No dredging shall be permitted unless appropriate and practicable steps have been taken which will first avoid, and if avoidance is not possible then minimize, or if neither avoidance or minimization are possible, then mitigate, potential adverse impacts to land under water or ocean, intertidal zone and special aquatic sites. No dredging shall be permitted if there is a practicable alternative that would have less impact on the aquatic ecosystem. An alternative is practicable if it is available and capable of being implemented after taking into consideration; costs, existing technology and logistics in light of overall project purposes, and is permissible under existing federal and state statutes and regulation.

(b) All applications, except for maintenance projects, shall include a comprehensive analysis of practicable alternatives as defined in 314 CMR 9.07(1)(a). The scope of alternatives to be considered shall be commensurate with the scale and purpose of the proposed activity, the impacts of the proposed activity, and the classification, designation and existing uses of the affected wetlands and waters in the Surface Water Quality Standards at 314 CMR 4.00.

(c) Dredging and dredged material management shall be conducted in a manner that ensures the protection of human health, public safety, public welfare and the environment.

(d) Applications submitted to the Department shall meet the criteria and performance standards of 314 CMR 9.07. If the project submitted by the applicant does not meet a particular provision of 314 CMR 9.07 and criteria of 314 CMR 4.00, the applicant shall demonstrate to the Department's satisfaction that the project will provide an equivalent level of environmental protection.

(e) Dredged material shall not be disposed if a feasible alternative exists that involves the reuse, recycling, or contaminant destruction and/or detoxification. An evaluation of whether such an alternative is feasible shall consider:

1. the volume and physical characteristics of the dredged material;
2. the levels of oil and/or hazardous materials present within the dredged material;
3. the relative public health and environmental impacts of management alternatives; and
4. the relative costs of management alternatives.

(f) The Department may consider any additional information including but not limited to that submitted under MEPA or NEPA on impacts from the dredging activity, management of the dredged material, the alternatives available for reuse or disposal techniques, alternative sites for the various management activities, or information related to other Department programs.

9.07: continued

(g) Dredged material management activities or facilities subject to the 401 Water Quality Certification, shall comply with the provisions of 314 CMR 9.00 and the conditions of the 401 Water Quality Certification. The Certification does not relieve the proponent of the obligation to comply with all other applicable federal, state and local statutes and regulations.

(h) Dredged material, including sediment, placed on or in the land at an upland location is subject to the release notification requirements and thresholds of 310 CMR 40.0300 and 40.1600 for soil, unless such placement is in accordance with the provisions of 310 CMR 40.0317(10) and 314 CMR 9.07 (4), (6), (9), (10), or (11).

(i) No dredging is permitted for the impoundment or detention of stormwater for purposes of controlling sedimentation or other pollutant attenuation. Dredging may be permitted to manage stormwater for flood control purposes only where there is no practicable alternative and provided that best management practices are implemented to prevent sedimentation or other pollution. No dredging is permitted for the impoundment or detention of stormwater in Outstanding Resource Waters.

(j) No dredging shall be permitted in the rare circumstances where the activity meets the criteria for evaluation but will result in substantial adverse impacts to the physical, chemical, or biological integrity of waters of the Commonwealth.

(k) No dredging shall be permitted in Outstanding Resource Waters, except for the following activities specified in this paragraph, which remain subject to an alternatives analysis and other requirements of 314 CMR 9.07:

1. Projects conducted or approved by public or private water suppliers in the performance of their responsibilities and duties in compliance with applicable laws to protect the quality of the water in the watersheds, or to maintain, operate and improve the waterworks system;
2. Activities determined by the Department to be for the express purpose and intent of maintaining or enhancing the resource for its designated use, after consultation with the entity, if any, with direct control of the water resource or governing water use;
3. Maintenance, repair, replacement or reconstruction but not substantial enlargement of existing and lawfully located structures or facilities including buildings, roads, railways, utilities and coastal engineering structures.
4. Maintenance dredging necessary to support or enhance existing water-dependent uses.
5. Improvement dredging necessary to support or enhance the enlargement of structures or facilities for water-dependent uses is allowed in the following limited circumstances:
  - a. in an Outstanding Resource Water that is designated for purposes other than public water supply; or
  - b. in an Outstanding Resource Water located within an Area of Critical Environmental Concern if the Department determines that the enlargement of structures or facilities for water-dependent uses is consistent with a resource management plan for the ACEC that has been adopted by the municipality and approved by the Secretary.

(l) Notwithstanding any other provision of 314 CMR 9.07, the Department may allow a project which will restore or otherwise improve the natural capacity of any wetland or other water of the Commonwealth. Such projects include, but are not limited to, dam removal, salt marsh restoration, stream restoration, nutrient management, control or removal of aquatic nuisance vegetation, or vegetation management to improve wildlife habitat.

(2) Sampling and Analysis Requirements. The applicant shall submit the results of all relevant sampling with the application, unless an alternative schedule is specifically authorized by the Department in writing. As part of sampling and analysis, the applicant shall perform a “due diligence” review to determine the potential for the sediment proposed to be dredged to have concentrations of oil or hazardous materials, as defined in 310 CMR 40.0000. Such a review may include, but is not limited to, an analysis of records of the local Board of Health, Fire Department, and/or Department of Public Works, the Department’s Bureau of Waste Site Cleanup, knowledge of historic land uses, information on prior dredging projects and discharges of pollutants in the project area watershed. Sampling that was conducted in accordance with the MCP as a part of site assessment activities or a remedial action shall be supplemented as necessary to comply with 314 CMR 9.07. Supplemental sampling, if necessary, shall be submitted with the application as results or as a sampling plan.



314 CMR: DIVISION OF WATER POLLUTION CONTROL

9.07: continued

Applicants for dredging projects proposing unconfined open water disposal shall comply with the sampling, testing, and evaluation requirements and procedures of the U.S. Army Corps of Engineers and U.S. Environmental Protection Agency. A copy of the Determination of Suitability for unconfined disposal shall be provided to the Department.

Unless a project is specifically exempted by the Department from the requirement for chemical analyses, sampling and analysis for upland reuse or disposal of dredged material, as set out in 314 CMR 9.07(2)(a), shall be carried out as follows:

NON-TEXT PAGE

9.07: continued

(a) No chemical testing shall be required if the sediment to be dredged contains less than 10% by weight of particles passing the No.200 U.S. Standard Series Testing Sieve (nominal opening 0.0029 inches), and if the required “due diligence” review demonstrates, to the Department’s satisfaction, that the area is unlikely to contain anthropogenic concentrations of oil or hazardous materials.

(b) In all other instances, chemical and physical testing shall be conducted and the information provided in writing to the Department. When characterizing dredged material, the applicant shall:

1. Consider available analytical information from prior dredging projects conducted at, or locations proximal to, the area proposed to be dredged.
2. Select sampling locations in a manner that ensures that representative information is obtained about the volume, potential contamination, grain-size distribution and total organic carbon of the sediment to be dredged.
3. Evaluate and delineate areas of potentially elevated contamination, based on proximity to outfalls, tributaries, industrial discharges or sources, boat-maintenance activities or historical spills of oil or hazardous materials. In such areas, samples shall not be composited but analyzed separately.
4. For projects up to 10,000 cubic yards, one core for every 1000 cubic yards of dredged material shall be collected. Up to three cores may be composited to create a single sample, provided:
  - a. The grain-size distribution and likelihood of contamination are similar based on depositional characteristics, spill history, and location of point source discharges;
  - b. Cores are composited from the same reach; and
  - c. Samples collected for analysis of volatile compounds are obtained from an individual core and not composited from multiple cores.

For all projects, a minimum of two representative samples shall be characterized physically and chemically.

5. For projects over 10,000 cubic yards, the applicant shall develop a project-specific sampling and analysis plan, taking into account the likely requirement for the alternative(s) being considered for management of the dredged materials. This plan shall be submitted in draft form to the Department for review and comment as part of the pre-application process.

6. At a minimum, sediment shall be analyzed for the following parameters unless specifically exempted by the Department:

Parameter <sup>1</sup>	Reporting Limit mg/kg (dry weight) – unless otherwise noted <sup>2</sup>
Arsenic	0.5
Cadmium	0.1
Chromium	1.0
Copper	1.0
Lead	1.0
Mercury	0.02
Nickel	1.0
Zinc	1.0
Polycyclic Aromatic Hydrocarbons (PAHs)	0.02
Polychlorinated Biphenyls (PCBs)-by NOAA Summation of Congeners	0.01
Extractable Petroleum Hydrocarbons <sup>3</sup>	25
Volatile Organic Compounds (VOC) <sup>4</sup>	0.1
Total Organic Carbon	0.1%
Percent Water	1.0%
Toxicity Characteristic Leaching Procedure <sup>5</sup>	As applicable
Grain Size Distribution – wet sieve (ASTM D422)	Sieve Nos. 4, 10, 40, 60, 200

<sup>1</sup> The applicant shall use the results of the due diligence review to determine whether additional parameters should also be analyzed.

## 9.07: continued

- <sup>2</sup> *If one or more of the Reporting Limits could not be met; the applicant shall include a discussion of the reason(s) for the inability to achieve the reporting limit (e.g., matrix interference).*
- <sup>3</sup> *Current method for the determination of Extractable Petroleum Hydrocarbons (EPH) MADEP January 1998*
- <sup>4</sup> *Required for sediment to be reused or disposed of in the upland environment unless the due diligence review indicates that VOC contamination is unlikely to be present.*
- <sup>5</sup> *Required to be performed when sediment is to be managed in the upland environment and if the total concentrations of metals or organic compounds are equal to or greater than the theoretical concentration at which TCLP criteria may be exceeded: As > 100 mg/kg, Cd > 20 mg/kg, Cr > 100 mg/kg, Pb > 100 mg/kg, Hg > 4 mg/kg.*

7. The Department may allow or require, at its discretion, analyses for additional parameters not listed in 314 CMR 9.07(2)(b)6. when dredging is proposed to be performed in areas where current or historic uses indicate that such contaminants are likely to be present.

8. The chemical analyses of sediment, included as part of an application for dredging, shall have been performed within three years of the date of submission of the application.

9. At the Department's discretion, the project proponent for an aquatic disposal facility may be required to perform a biological assessment of the dredged materials to determine whether there is the potential for the inadvertent transfer of an "invasive species" from the dredging area to the disposal location.

(3) Dredging Performance Standards. Dredging shall be planned and conducted to minimize short-term, long-term, and cumulative impacts on the aquatic ecosystem and to provide protection to human health.

(a) The resuspension of silt, clay, oil and grease and other fine particulate matter shall be minimized to protect aquatic life and other existing and designated uses of waters of the Commonwealth.

(b) Improvement dredging activities shall minimize and, to the maximum extent possible, avoid affecting areas of ecological importance including but not limited to vegetated wetlands, shellfish habitat, spawning habitat, habitat of state-listed rare wildlife, salt marsh, intertidal zone, riffles and pools, and vegetated shallows.

(c) Where feasible, a minimum of 25-feet shall remain unaltered between the edge of vegetated wetlands, salt marsh or vegetated shallows, and waterward edge of the top of the slope of the dredging area.

(d) Dredging shall not be undertaken during migration, spawning or juvenile development periods of finfish, shellfish, crustaceans or merostomatans in locations where such organisms may be affected, except as specifically approved by the Department. Restricted time periods for dredging, or in-water sediment management, will be established by the Department after consultation with Massachusetts Division of Marine Fisheries or Division of Fisheries and Wildlife. Any applicant proposing to dredge during the recommended restricted time period must demonstrate to the Department's satisfaction that measures to minimize impacts (*e.g.*, dredging in the dry, the use of silt curtains, *etc.*) will be sufficient to avoid adverse affects to the species of concern. The Department may consider use of a mixing zone to achieve compliance with Surface Water Quality Standards. Any mixing zone shall be as small as feasible, and site-specific conditions, including, but not limited to depth, currents, and the presence of fisheries and other resources, will determine the mixing zone for any specific project. Within the mixing zone the minimum criteria for chronic toxicity may be exceeded, but the minimum criteria for acute toxicity shall not be exceeded. All water quality criteria apply at the boundary of the mixing zone. The Department may prohibit use of a mixing zone as it deems necessary to provide a reasonable margin of safety for critical uses of waters, *e.g.*, public water supply intakes, shellfish harvesting areas in Class SA and SB waters, wildlife sanctuaries, habitats of endangered species and species of special concern, and/or in Areas of Critical Environmental Concern (ACEC).

(e) In evaluating the potential effects of suspension of contaminated sediment on aquatic organisms, the Department may compare the bulk sediment chemistry with recognized guideline values (*e.g.*, Long *et al.* (1995), Ingersoll *et al.* (2000), *etc.*). The Department reserves the right to request additional sampling and analyses to evaluate the effects of suspension of contaminated sediment on aquatic organisms and/or water quality.

9.07: continued

(4) Intermediate Facilities. Placement of dredged material at an intermediate facility shall be governed by the 401 Water Quality Certification under 314 CMR 9.07(4) unless waived in writing by the Department. The Department may impose specific conditions to ensure that activities at these facilities are conducted in compliance with these requirements:

(a) Dredged material shall be placed in a secure manner to minimize exposure to humans and the environment, and activities shall be carried out in a manner that does not create a nuisance or a threat to public health or the environment.

(b) All activities shall minimize runoff and soil loss through erosion. Any runoff or erosion that does occur shall be remediated and corrective action and/or additional controls shall be immediately implemented to prevent future occurrences. If other permits or approvals are required to conduct the remediation and/or corrective action, then those must be obtained.

(c) Unless approved by the Department, dredged material contaminated above RCS-1 criteria, as defined in 310 CMR 40.0933 and 40.1600, which is stored for more than 24 hours at the site shall be placed in watertight containers or entirely on a base composed of an impermeable material. The dredged material shall be immediately covered with the same material or other suitable material so as to minimize the infiltration of precipitation, volatilization of contaminants, and erosion. Any cover material used shall be properly secured and possess the necessary physical strength to resist tearing by the wind. Any failure of materials or procedures used in the base layer or cover layer shall be immediately repaired, replaced, or re-secured so as to minimize precipitation infiltration, volatilization, and erosion or runoff of the dredged material.

(d) An Intermediate Facility shall not be located:

1. within a Current Drinking Water Source Area or a Potential Drinking Water Source Area as defined in 310 CMR 40.0006;

2. within a 500 foot radius of a Private Water Supply Well as defined in 310 CMR 40.0006;

3. less than ¼ mile upgradient of a surface drinking water supply as defined by groundwater flow or surface water drainage;

4. less than 250 feet downgradient of a surface drinking water supply as defined by groundwater flow or surface water drainage;

5. within 500 feet of a health care facility, prison, elementary school, middle school or high school or children's pre-school, licensed day care center, senior center or youth center, excluding equipment storage or maintenance structures;

6. where traffic impacts from the facility operation would constitute an unacceptable impact to the public, taking into consideration the following factors:

a. traffic congestion,

b. pedestrian and vehicular safety,

c. road configurations,

d. alternate routes,

e. vehicle emissions, and

f. other environmental impacts related to traffic.

7. where it would have a permanent adverse impact on Endangered, Threatened, or Species of Special Concern listed by the Natural Heritage and Endangered Species Program of the Division of Fisheries and Wildlife, an Ecologically Significant Natural Community as documented in writing by the Natural Heritage and Endangered Species Program, the wildlife habitat of any state Wildlife Management Area, or an ACEC;

8. in a location where the anticipated emissions from facility operations would not meet required state and federal air quality standards or criteria or the Department determines that it would otherwise constitute an unacceptable risk to the public health, safety or the environment, taking into consideration;

a. the concentration and dispersion of emissions,

b. the number and proximity of sensitive receptors, and

c. the attainment status of the area.

(5) Transportation.

(a) All dredged material, when transported upon public roadways, shall have no free liquid as determined by the Paint Filter Test or other suitably analogous methodology acceptable to the Department and be covered to minimize fugitive dust (unless transported in vehicles specifically designed to haul liquid materials).

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(b) Truck tire and undercarriage washing (or equally effective mitigation measures) shall be employed to minimize tracking of sediment onto public roadways. Such activities shall be performed in a manner that avoids siltation into wetland resources.

(c) Dredged material shall be transported using a Dredged Material Tracking Form (DMTF) available from the Department. The Dredged Material Tracking Form, or reproduction, shall accompany each shipment of dredged material transported from the dredging site and shall be retained by the entity to whom the 401 Certification is issued for a minimum of five years from the date of transport. The Department reserves the right to impose additional requirements on the transportation of dredged material if the Department determines that such materials represent a hazard to health, safety, public welfare or the environment. The DMTF shall contain the following information:

1. the address or location of the area dredged and the address of any Intermediate Facilities where the dredged material was stockpiled, stored, treated and/or consolidated prior to transport;
2. the name, address and telephone number of the entity to whom the 401 Certification has been issued;
3. the name and address of the transporter;
4. the name and address of the receiving facility or location;
5. the volume of dredged material that will be shipped to the receiving facility;
6. the original dated signature of a Qualified Environmental Professional attesting that the dredge material as characterized, conforms with permitting and regulatory requirements for acceptance at the receiving facility or location;
7. the original dated signature of an authorized representative of the entity to whom the 401 Certification was issued certifying the accuracy and completeness of the shipping document;
8. upon completion of all shipping activities, the original dated signature of a representative of the receiving facility or location, attesting to the total volume or weight of dredged material received by the facility or location; and
9. any other information determined necessary by the Department.

(d) Use of a Dredged Material Tracking Form shall not be required when the dredged material requires shipment:

1. Using a Hazardous Waste Manifest pursuant to 310 CMR 30.000; or
2. Using a Bill of Lading under 310 CMR 40.0030.

(e) In the case where the dredged material is transported in whole, or in part, by barge, a Barge Tracking Form (available from the Department) shall also be required and shall be retained by the entity to which the 401 Certification is issued for a minimum of five years.

(f) Any barge used shall be the best reasonably available marine design and in good operating condition so that minimal discharge of sediment or water occurs during transport to the authorized disposal location(s). Deck barges shall not be used unless the barge has been modified to provide for complete containment of the sediments and written approval has been obtained from the Department.

(6) Beach Nourishment. All projects designed to nourish beach, dune or near-shore areas of land under ocean, utilizing dredged-sediment as source material, shall be carried out in accordance with the Best Management Procedures for Beach or Dune Nourishment and any procedures developed by the Massachusetts Office of Coastal Zone Management and in accordance with M.G.L. c.131, § 40 (the Wetland Protection Act) and relevant portions of 310 CMR 10.00 and M.G.L. c. 91 and 310 CMR 9.00 and M.G.L. c. 132A and 302 CMR 5.00. Right of public access shall be provided for beach nourishment projects on private beaches where public funds are utilized for the activities. Dredged material placed in accordance with this provision shall not be a solid waste and is not subject to 310 CMR 16.00 and 310 CMR 19.000.

(7) Unconfined Open Ocean Disposal. Applicants for dredging projects proposing unconfined open water disposal at designated disposal sites shall comply with sediment and water quality sampling, biological testing, and evaluation according to the requirements and procedures of the U.S. Army Corps of Engineers and U.S. Environmental Protection Agency. The Department may include specific conditions related to time-of-year disposal restrictions to protect the Right Whale or other relevant requirements consistent with the Massachusetts Clean Water Act or other state statutes.

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(8) Confined Disposal.(a) General.

1. Aquatic disposal of dredged sediment that is unsuitable for open ocean disposal shall include management techniques to isolate the sediment from the surrounding environment thereby minimizing potential adverse impacts to the benthic and pelagic communities. The principal methods to isolate the material are to cap it with a layer of "clean" material (Confined Aquatic Disposal) or use of a containment structure (Confined Disposal Facility). Capping may be required for both interim and final controls.

2. In determining the acceptability of a site for a confined disposal facility, the Department will consider all relevant factors including, but not limited to: hydrology and hydrodynamics of the site, existing sediment (physical and chemical quality) at and proximal to the site, protection of marine and wetland resources, recreational activities and unique site factors and conditions. No confined disposal facilities and/or confined aquatic disposal cells shall be located in Special Aquatic Sites or Areas of Critical Environmental Concern.

3. No confined disposal facilities and/or confined aquatic disposal cells shall be permitted unless appropriate and practicable steps have been taken which will first avoid, and if avoidance is not possible then minimize, or if neither avoidance or minimization are possible, then mitigate, potential adverse environmental impacts. No confined disposal facilities or confined aquatic disposal cells shall be permitted if there is a practicable alternative that would have less impact on the aquatic ecosystem. An alternative is practicable if it is available and capable of being implemented after taking into consideration; costs, existing technology and logistics in light of overall project purposes, and is permissible under existing federal and state statutes and regulation.

4. All applications proposing confined disposal facilities and/or confined aquatic disposal cells shall include a comprehensive analysis of practicable alternatives as defined in 314 CMR 9.07(1)(a). The scope of alternatives to be considered shall be commensurate with the scale and purpose of the proposed activity, the impacts of the proposed activity, and the classification, designation and existing uses of the affected wetlands and waters in the Surface Water Quality Standards at 314 CMR 4.00.

5. The siting, operation and post-closure maintenance of confined disposal facilities and/or confined aquatic disposal cells shall be conducted in a manner that ensures the protection of human health, public safety, public welfare and the environment.

(b) Placement.

1. Sediment shall be placed into the facility in a manner that minimizes the escape and release of sediment to the environment. The Department may require water quality monitoring during placement and/or disposal activities to demonstrate that the activities comply with applicable water quality standards.

2. Sediment placement shall occur only during specific periods of time authorized by the Department in writing to provide maximum dilution but minimal dispersion and transport of fine contaminated sediment during placement operations. If an alternative technology is approved that allows the material to be placed directly in the disposal cell without passing through the water column, disposal may occur at any time.

3. Adequate time shall be provided to allow the sediment to properly consolidate prior to placement of the cap to minimize the escape of sediment from confinement during cap placement. Unless specifically approved by the Department in writing, capping of any cell shall be completed within one month of the start of cap placement.

4. The applicant shall provide the Department with a written schedule of activities related to initiation and completions of the capping phase.

(c) Confined Aquatic Disposal (CAD).1. Design Standards.

a. The applicant shall take vessel traffic (*e.g.* passage of tugboats or deep draft vessels) into account during cell filling to minimize entrainment of sediment from propeller-wash.

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- b. Unless specifically exempted by the Department in writing or in regulations, the applicant shall use a water quality model to assess compliance with water quality standards and to determine if restrictions on volume or timing of disposal events are required (*e.g.*, tidal stage, tidal current, disposal volume, multiple disposal event timing, and proximity in time to scheduled vessel passage).
- c. If project sequencing allows, the most contaminated material shall be placed at the bottom of cells to allow for the greatest level of sequestering.
- d. The disposal cell cap shall be constructed and placed in a manner that minimizes disturbance of the dredged material in the disposal cells and the Applicant shall provide the following:
  - i. Documentation of the placement of the capping material including the amount and location of each load.
  - ii. Documentation of the paths of the disposal vehicle to determine where the following load should be placed (if multiple loads are required) to keep the cap thickness as even as possible until the required thickness is achieved.
  - iii. Surveys of each capped cell to verify that the required areal coverage and vertical thickness is achieved.
  - iv. Cap material shall be placed wet.
  - v. Tugs shall be used to move deeper draft self-propelled vessels to minimize prop-wash effects.
  - vi. There shall be no mechanical disturbance of the cap by a drag bar, clamshell bucket, barge spudding or other means, unless approved by the Department.
  - vii. The applicant shall assure that at least 90% of the CAD surface area shall include a "clean layer" whose vertical thickness contains at least 70% sand or other approved capping material. Layers comprised of less than 70% sand will be considered a "zone of mixed material" (interface layer) and will not be considered in the determination of capping compliance.

2. Monitoring.

- a. If subaqueous cells are utilized, bathymetric surveys shall be conducted prior to cell excavation, after the cell is excavated and constructed, after the disposal of dredged material, and after the cap is placed.
- b. Baseline conditions of general water quality, as well as specific contaminants determined to be in the dredged material to be disposed of, shall be assessed prior to the start of any dredging or dredged material placement activities.
- c. Each disposal event shall be documented in writing, including the date, time and source of dredged material; the time and location of disposal (including high accuracy location coupled with orientation of the disposal vessel); the equipment used to dredge and dispose of the material; the weather and sea conditions; and personnel on duty. In addition, an estimate of the volume of material disposed shall be provided. Detailed, step-by-step requirements for filling cells shall be developed and utilized.
- d. The applicant shall obtain cores from a statistically valid number of disposal cells one year and five years after cells have been capped, selected according to a random distribution among all cells, to evaluate the cap thickness and interface layer, unless alternative times are specified by the Department, to determine the long-term integrity and thickness of the cap material and overlying sediment.
- e. Recolonization of benthic species on the surface of the cell shall be assessed against reference site(s) one year after completion of the project, unless an alternative time is specified by the Department. The results of the assessment shall be submitted to the Department in writing within 30 days of it being complete.

(d) Confined Disposal Facilities (CDF).

1. Design Standards.

- a. The facility shall be designed and constructed to allow for stormwater controls and material dewatering and the applicant shall evaluate the need for leachate controls, including a liner system.



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- i. Stormwater controls shall prevent erosion, reduce the discharge of pollutants, and protect the physical integrity of the facility. The controls shall be designed to prevent flow onto the active portion of the facility and control the run-off from the active portion of the facility for at least the water volume resulting from a 24-hour and 25-year storm. The Department may require evaluation of a different level storm event due to the nature of the dredged material and/or potential discharge to sensitive receptors (*e.g.*, ORWs, ACECs).
  - ii. The operator shall provide sufficient stormwater drainage controls and diversion structures to promote drainage from the facility, minimize drainage onto the facility, and prevent ponding on or adjacent to the CDF area. Stormwater drainage structures shall be designed, constructed and maintained so as to ensure their integrity;
  - iii. In a situation where significant settlement, ponding of water or erosion occurs during the operation, closure or the post-closure period, the operator or owner shall immediately institute corrective actions and mitigation. If other permits or approvals are required to conduct the corrective action, then those must be obtained.
2. The operator shall prevent the development of vermin, insects, dust, odors and other nuisance conditions.
  3. The operator of facilities located in proximity to airports shall operate and maintain the facility in a manner to ensure that the facility shall not pose a bird hazard to aircraft.
  4. The operator shall provide sufficient fences or other barriers to prevent unauthorized access to the facility
- (e) The facility shall include a final cover system, which shall: minimize the percolation of water through the final cover into the fill material, promote proper drainage of precipitation, minimize erosion of the final cover, facilitate the venting and control of gas (if applicable), ensure isolation of the sediment from the environment, and accommodate settling and subsidence of the facility so that the final cover system continues to operate as designed.
- Unless authorized by the Department in writing, the final cover system shall have a final top slope of not less than 5% and the final side slopes no greater than three horizontal to one (3:1) vertical, and shall be constructed:
1. so as to minimize erosion of all layers of the final cover by using terraces or other appropriate stormwater controls as set out in the Department Stormwater Management Handbooks Volumes One and Two; and
  2. so that the low permeability layer is protected from the adverse affects of frost or freeze/thaw cycles; and
  3. to maintain slope stability.
- (f) The final facility cap shall be designed and constructed: to remain impervious for the expected life and post-closure period of the facility; have a minimum compacted thickness of 18 inches; be compacted to minimize void spaces; to be capable of supporting the weight imposed by the post-closure use without excessive settling or causing or contributing to the failure of the low permeability layer; and to be free of materials that, because of their physical, chemical or biological characteristics, may cause or contribute to an increase in the permeability of the low permeability layer or otherwise cause a failure of the low permeability layer.
- (g) An operation and maintenance plan, subject to the Department's review and written approval, shall be developed and implemented, including a narrative description of operation and maintenance requirements or activities proposed to be conducted during the life of the facility (including the post-closure period) and a proposed schedule for regular inspections and maintenance of the facility, including standard operating procedures.
- (h) The owner or operator shall hire an independent professional engineer, knowledgeable and experienced in matters of containment structures, who shall oversee the installation and construction of all components of the containment structures and certify in writing all design and as-built plans for the facility.
- (i) Siting Criteria. A CDF shall not be located:
1. within 500 feet of an occupied residential dwelling, health care facility, prison, elementary school, middle school or high school or children's pre-school, licensed day care center, senior center or youth center, excluding equipment storage or maintenance structures; unless the applicant shows a valid option to purchase the business or facility within the restricted area, the exercise of which shall be a condition of any Certification;

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2. where traffic impacts from the facility operation would constitute an unacceptable risk to the public, taking into consideration the following factors
  - a. traffic congestion,
  - b. pedestrian and vehicular safety,
  - c. road configurations,
  - d. alternate routes,
  - e. vehicle emissions; and
  - f. other environmental impacts related to traffic.
3. where it would have an adverse impact on Endangered, Threatened, or species of Special Concern listed by the Natural Heritage and Endangered Species Program of the Division of Fisheries and Wildlife, an Ecologically Significant Natural Community as documented by the Natural Heritage and Endangered Species Program or the wildlife habitat of any state Wildlife Management Area.
4. in a location where the anticipated emissions from facility operations would not meet required state and federal air quality standards or criteria or the Department determines that it would otherwise constitute an unacceptable risk to the public, taking into consideration:
  - a. the concentration and dispersion of emissions,
  - b. the number and proximity of sensitive receptors, and
  - c. the attainment status of the area.

(9) Shoreline Placement and Upland Material Reuse Under a 401 Certification. In accordance with a 401 Certification pursuant to 314 CMR 9.07 the Department may permit:

- (a) Shoreline Placement of dredged material at a location proximal to the dredging activity that lies within the 100-year floodplain or buffer zone as defined in 310 CMR 10.00 which ever is greater. Proposals to reuse dredged material shall comply with the regulatory standards of 310 CMR 10.00 and 310 CMR 9.00. Material reuse may include, but is not limited to, use as fill behind bulkheads, or to maintain or improve existing filled areas.
- (b) Upland Placement of dredged material in any upland area as fill or for other reuse activities, provided the concentrations of oil and hazardous material in the dredged material are less than the S-1 soil standards applicable at the receiving location as specified in 310 CMR 40.0975, that the material is not otherwise a hazardous waste and will not adversely affect an existing public or private potable water supply, provided that:
  1. The material is not reused at a location(s) where:
    - a. the nature of the contaminants (evaluated as chemical families such as metals, PAHs, petroleum hydrocarbons, halogenated volatile organic compounds, halogenated pesticides, PCBs, and dioxin-like compounds) in the dredged material is different than that at the receiving location; and
    - b. the concentration(s) of oil and hazardous materials in the soil at the receiving location are significantly lower than the levels of those oil and hazardous materials present in the material;
  2. The material is taken to a site within a designated port area as defined in 310 CMR 9.00 where practicable.
  3. The material is dewatered prior to transportation from the site of dredging and any Intermediate Facilities to the reuse location;
  4. The material is managed, transported, and placed at the receiving location in compliance with the requirements of 314 CMR 9.07;
  5. The Department has not determined in writing that either because of the nature of the proposed activity, the amount of the material, and/or the characteristics of the material that the material requires management as a solid waste subject to the provisions of 310 CMR 16.00 and/or 310 CMR 19.000; and
  6. The applicant provides the following information with the 401 Water Quality Certification application;
    - a. for the property at which the dredge material is proposed to be reused:
      - i. the name and address of the owner of the property,
      - ii. the name and address of the person proposing to reuse the material, if different than the owner of the property,
      - iii. the address of the property, and
      - iv. a United States Geological Survey Topographic Map showing the location of the property.

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- b. a description of the proposed reuse for the material, including but not limited to, the volumes and schedule for the activity;
- c. a physical and chemical characterization of the material and the soil at the receiving location within and adjacent to the footprint of the proposed area where the material is to be placed;
- d. a statement of certification signed by the applicant and the owner of the property at which the dredge material is proposed for reuse that the reuse of the material complies with the provisions of 314 CMR 9.07(9) and 314 CMR 9.07; and
- e. Documentation that the Board of Health of the community(ies) within which the property(ies) are located that the dredged material is proposed for placement has been notified in writing of the proposal.

(c) Reuse under a Dredged Material Reuse Decision at any upland area not authorized under 314 CMR 9.07(9)(a) or (b), provided the applicant obtains a prior written approval of dredged material reuse from the Department, which complies with the following requirements and conditions:

1. Submittal and Criteria Requirements. An application for a Dredged Material Reuse Decision (DMRD) shall be submitted to the Department, and a copy of the application shall be filed with the board of health of jurisdiction, unless the Department determines in writing that the proposed use is not limited to a specific location and therefore it is not practical to identify the board of health with jurisdiction. The application shall contain at least the information indicated in 314 CMR 9.07(9)(c) 2.a. through h.; and the proposed reuse shall comply with the criteria and requirements in 314 CMR 9.07(9)(c)3.a. and b.
2. Application Requirements. Each application shall contain at a minimum:
  - a. a description of the proposed use;
  - b. chemical and physical characterization of the dredged material as defined in 314 CMR 9.07(2);
  - c. the proposed method of handling and utilization of the dredge material;
  - d. identification of the quantity, quality and source of the material;
  - e. a description of any risk management techniques being considered, including any deed or other use limitations, location restrictions, best management practices or engineering controls;
  - f. identification of the proposed location of use, if applicable, or types of locations where the dredge material will be used (*e.g.*, highway rights-of-way, industrial zoned properties, *etc.*);
  - g. a U.S.G.S. 7.5 minute topographic map or smaller scale equivalent map clearly marking the locations of the beneficial use activities; and
  - h. such additional information as the Department deems necessary and appropriate to evaluate and permit the proposed processing and dredge material reuse.
3. Approval Criteria and Requirements. Compliance with the Approval Criteria can be achieved by demonstrating that release and exposure pathways are adequately controlled through the use of risk management procedures (*e.g.* engineering controls; use limitations, *etc.*) If adequate control of such pathways cannot be demonstrated, a reuse specific assessment is required, as described in 314 CMR 9.07(9)(c)3.b.i. or ii. Compliance with the Criteria has been achieved if no concentration of any hazardous material is greater than the Upper Concentration Limit as described in 310 CMR 40.0996 and conditions specified in either 314 CMR 9.07(9)(c)3.b.i. or ii. are met:
  - a. The concentrations of oil and/or hazardous materials are not significantly above background, as determined by a statistically valid and appropriate background concentration sample data set of Massachusetts soils or by a reuse location-specific determination of background; or
  - b. No concentration of oil and/or hazardous materials contained in, or likely to be released as a result of the use of, the dredge material, as appropriate, exceeds acceptable limits as demonstrated using one of the following approaches:

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i. Numerical Standards Approach. Oil and/or hazardous material concentrations may not exceed applicable standards and guidelines as stipulated by DEP. If an appropriate DEP standard or guideline does not exist for all constituents in all relevant media, then a guideline may be proposed by the applicant developed using protocols consistent with those used in the derivation of existing DEP standards and guidelines for that medium. In addition to the standards and guidelines, the applicant shall demonstrate that the reuse will not lead to exceedances of the Massachusetts Drinking Water Quality Standards at 310 CMR 22.00; Massachusetts Air Quality Standards at 310 CMR 7.00; Massachusetts Contingency Plan Method 1 Standards at 310 CMR 40.0970 applicable to the reuse location; Massachusetts Surface Water Quality Standards at 314 CMR 4.00 and alterations of wetland resources areas in violation of 310 CMR 10.00.

ii. Total Waste Reuse Risk Approach. Using this approach, Total Waste Reuse cancer and non-cancer risks shall be determined as follows:

- Total cancer risks and non-cancer risks shall be calculated for all appropriate exposure pathways and receptors.
- The assessment shall be performed in a manner consistent with scientifically acceptable risk assessment practices as detailed in guidance published by the Department.
- A condition of no significant risk to human health has been achieved if:
  - No Exposure Point Concentration of any hazardous material is greater than applicable public health or environmental standards; and,
  - Total Waste Reuse Risk (the aggregate risk attributable to oil and/or hazardous materials) results in excess lifetime cancer risk of less than one-in-one hundred thousand and a noncancer cumulative hazard index of less than one.

4. Public Safety and Welfare. A level of no significant risk to public safety and welfare exists or has been achieved if the use of the dredged material will not pose a threat of physical harm or bodily injury to people and will not create nuisance conditions, including, but not limited to, noxious odors and noise, in the foreseeable future.

5. Environment. A level of no significant risk of harm to the environment exists, or has been achieved, if there is no indication of the potential for biologically significant harm (at the subpopulation, community, or system-wide level), either currently or for any foreseeable period of time, to environmental receptors considering their potential exposures to the dredge material.

6. Property Owner Notification. The Applicant shall prepare and record, when required by this or other permit term or condition, a record in the Registry of Deeds, Land Court, or other permanent record approved by the Department that shall:

- a. Provide notice to holders of any interest(s) in a property or a portion thereof (including without limitation, owners, lessees, tenants, mortgagee, and holders of easement rights) of the existence and location of the dredge material at such property and the conditions for continued beneficial use and ultimate disposal, if applicable;
- b. Outline management options if removed, modified, or processed during its lifecycle to prevent adverse impacts and significant risks to public health, safety and the environment, including, but not limited to, nuisance conditions and public welfare impacts; and,
- c. Provide reference to the Department DMRD application file by including the permit application transmittal number and file location.

Dredged material, when managed in accordance with provisions 314 CMR 9.07(9) (a),(b) or (c), shall not be considered solid waste for the purposes of 310 CMR 16.00 and 310 CMR 19.000 and its management shall not be considered disposal, unless the Department determines in writing that due to the chemical or physical characteristics of the dredged material or the nature of the activity and/or the amount of the material that the dredged material is a solid waste.

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(10) Management of Dredged Material at Disposal Sites Pursuant to M.G.L. c. 21E and 310 CMR 40.0000, the Massachusetts Contingency Plan.

(a) The dredging, management, and placement of dredged material generated at a disposal site at which response actions are being conducted pursuant to 310 CMR 40.0000, the Massachusetts Contingency Plan, shall be performed pursuant to the provisions of 310 CMR 40.0000 and 314 CMR 9.00. A copy of the remedial action plan under 310 CMR 40.0000, *e.g.*, Immediate Response Action Plan, Release Abatement Measure Plan, Remediation Implementation Plan in which the activity is being conducted and the appropriate transmittal form shall be included with the application for the 401 Water Quality Certification, unless specifically exempted by the Department in writing or in these regulations.

(b) The dredging, management at an Intermediate Facility, and placement at a Confined Disposal Facility or Confined Aquatic Disposal Facility of dredged material generated at a disposal site as part of a remedial action pursuant to 310 CMR 40.0000 shall also be subject to the provisions of 314 CMR 9.00 and a 401 Water Quality Certification. In addition, dredged material generated at a disposal site as part of remedial action under 310 CMR 40.0000 shall be managed in accordance with 310 CMR 40.0000, including but not limited to the provisions of 310 CMR 40.0030.

(c) Dredged material containing oil and/or hazardous materials and that is not otherwise a hazardous waste may be brought from another location to a disposal site and utilized as part of a comprehensive remedial action pursuant to section 310 CMR 40.0800 of the Massachusetts Contingency Plan, provided that:

1. The material is dewatered prior to transportation to the disposal site;
2. The material is not reused at a location where:
  - a. the nature of the contaminants (evaluated as chemical families such as metals, PAHs, petroleum hydrocarbons, halogenated volatile organic compounds, halogenated pesticides, PCBs, and dioxin-like compounds) in the dredged material is different than that at the receiving location; and
  - b. the concentration(s) of oil and hazardous materials in the soil at the receiving location are significantly lower than the levels of those oil and hazardous materials present in the material;
3. It has been demonstrated that it is not feasible to reduce or approach the level of oil or hazardous material at the site of reuse to background in accordance with 310 CMR 40.850;
4. The reuse of the material does not extend beyond the boundary of the area of contaminated soil at the disposal site;
5. The reuse of the material does not result in a condition of Significant Risk as defined in 310 CMR 40.0000;
6. The material substitutes for a material that is otherwise required for and integral to the remedial action at the disposal site unless otherwise authorized by 314 CMR 9.07(c);
7. Unless otherwise approved by the Department in writing, the remedial action is conducted under a Phase IV – Remedy Implementation Plan developed pursuant to 310 CMR 40.0870 that provides for the use of the material at the disposal site.
8. The material is taken to a 21E site within a designated port area as defined in 310 CMR 9.00 where practicable.

(11) Management of Dredged Material Under the Solid Waste Regulations Pursuant to 310 CMR 16.00 and 19.000. Dredged material placed at upland locations other than under 314 CMR 9.07(6), (9) and (10) shall be managed subject to provisions of the Solid Waste Regulations at 310 CMR 16.00 and 19.000 and relevant Guidelines and Policies.

(12) Applicability of M.G.L. c.21C and 310 CMR 30.000, the Massachusetts Hazardous Waste Regulations. Dredged material when temporarily stored at an intermediate facility pursuant to 314 CMR 9.07(4), or when placed in confined disposal pursuant to 314 CMR 9.07(8) shall not be subject to regulation as a hazardous waste under 310 CMR 30.000, provided it is managed in accordance with the following:

- (a) the material is managed in accordance with requirements established in a Clean Water Act (33 U.S.C. 1344) § 401 certification, specifically covering the intermediate facility or the confined disposal; and

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(b) the material is managed in accordance with requirements included in a permit issued under § 404 of the Clean Water Act, specifically covering the intermediate facility or the confined disposal;

(c) this exemption shall not apply:

1. to any facility or activity that is not subject to regulation under § 404 of the Clean Water Act;
2. to any facility or activity for which 401 certification requirements have been waived by the Department;
3. to any facility or activity regarding which all 401 certification requirements established by the Department have not been included in a 404 permit; or
4. if the Department determines that compliance with some or all of the provisions of 310 CMR 30.000 is required.

(13) Interstate Management.

(a) Dredged Material from Out-of-state Waters. An applicant proposing to manage dredged material from out-of-state waters pursuant to permits issued for Massachusetts facilities which are proposed to handle dredged material shall file a notification on a form available from the Department. Any out-of-state applicant proposing to dispose, manage, or use dredged material in Massachusetts shall contact the Department to discuss the project prior to the submittal of permit applications.

(b) Dredged Material Going to Out-of-state Management Facilities. An applicant proposing to use or dispose of dredged material originating in Massachusetts at an out-of-state location shall demonstrate to the Department that this alternative is approved by the receiving State. Documentation shall include:

1. evidence that acceptance of the dredged material by the facility complies with the requirements of the receiving state, which may consist of either:
  - a. letter from the appropriate regulatory agency of the receiving state approving receipt of the dredged material, or
  - b. copies of the relevant portions of the facility's permit;
2. evidence that the dredged material has been characterized and meets the facility's acceptance criteria; and
3. written documentation that the receiving facility has agreed to accept the dredged material.

(14) Certification Requirements. The Department may incorporate into its Certification requirements and conditions for each milestone in the dredging process, which shall be performed by the project proponent. Documentation of the fulfillment of the requirements and conditions for each milestone (*e.g.*, quality assurance/quality control plan, liner installation requirements, cap construction) shall be prepared by a Qualified Environmental Professional and submitted to the Department.

(15) Post-closure Use. No person shall use a dredged material placement facility site permitted under 310 CMR 9.07(9) for any purpose other than that established in the 401 Certification after closure without first obtaining Department approval.

(16) Financial Responsibility for Closure, Post-closure and Corrective Actions. The owner or operator of a dredged material placement or disposal facility may be required to establish or obtain, and continuously maintain, financial assurance that is adequate to assure the Department that the owner or operator is at all times financially capable of complying with the provisions of 314 CMR 9.00 governing the closure of the facility and its post-closure maintenance.

9.08: Variance

The Commissioner may issue a variance of the criteria for evaluation of applications under 314 CMR 9.06 or 9.07 if the applicant demonstrates that:

- (1) All reasonable measures have been proposed to avoid, minimize, and mitigate adverse effects on the environment; and

9.08: continued

(2) The variance is justified by an overriding public interest or necessary to avoid a certification that so restricts the use of property as to constitute an unconstitutional taking without compensation.

The applicant may file an application for a variance with the Commissioner of the Department stating the proposed measures to avoid, minimize, and mitigate adverse effects and evidence of an overriding public interest or unconstitutional taking. If after public notice the Commissioner finds that the activity meets the variance criteria, the Commissioner shall specify which regulation(s) has been waived and what conditions must be met for certification. The Commissioner may consolidate variance decisions under 314 CMR 9.00, 310 CMR 10.36 and 10.58, and 310 CMR 9.21. Publication of the variance application in the Environmental Monitor shall constitute notice to the public and to agencies with acquisition authority of the Department's pending determination.

9.09: 401 Water Quality Certification

(1) The Department will certify in writing to the appropriate federal agency and to the applicant whether or not the proposed project will meet applicable water quality standards and minimize environmental impacts through compliance with 314 CMR 4.00 as implemented and supplemented by 314 CMR 9.00. Certification will be denied if the criteria of 314 CMR 9.06, 9.07, or 9.08 as applicable are not met. The Department shall send copies of the 401 Water Quality Certification or denial concurrently to the conservation commission, any person who submits written comments during the public comment period and any others who submit a written request. The certification or denial will contain:

- (a) the name and address of the applicant, the address of the proposed activity, and the date of the Department's determination;
- (b) the federal permit number, the 401 Water Quality Certification Transmittal Number and the Wetlands Protection Act File Number, if applicable and available;
- (c) a statement that there is or is not reasonable assurance that the activity will be conducted in a manner which will not violate applicable Surface Water Quality Standards at 314 CMR 4.00 as implemented by 314 CMR 9.00 and a statement of reasons if certification is denied;
- (d) any conditions deemed necessary by the Department to insure maintenance or attainment of water quality, minimization of any damage to the environment that may result from the project, or compliance with any applicable provisions of Massachusetts law that the Department is authorized to administer. As a condition of certification of subdivisions or other phased activities, applicants may be required to record a deed restriction which would limit subsequent discharges of dredged or fill material to ensure that the criteria for the evaluation of applications have been applied to a single and complete project, including all components of multi-phased activities;
- (e) the date the work may begin. No activity may begin prior to the expiration of the appeal period or until a final decision is issued by the Department if an appeal is filed;
- (f) a statement that the certification does not relieve the applicant of the duty to comply with any other statutes or regulations;
- (g) notification of the right to request an adjudicatory hearing as described in 314 CMR 9.10; and
- (h) where applicable, other state law determinations or approvals, including but not limited to a Chapter 91 dredging permit under 310 CMR 9.05(2).

(2) Written applications may be made to amend existing, valid 401 Water Quality Certifications and are subject to the Department's review and approval or denial.

(3) Written applications may be made to extend an existing, valid 401 Water Quality Certifications and are subject to the Department's review and approval or denial.

9.10: Appeals

(1) Right to Appeal. Certain persons shall have a right to request an adjudicatory hearing concerning certifications by the Department when an application is required:

- (a) the applicant or property owner;
- (b) any person aggrieved by the decision who has submitted written comments during the public comment period;

9.10: continued

(c) any ten persons of the Commonwealth pursuant to M.G.L. c. 30A where a group member has submitted written comments during the public comment period; and

(d) any governmental body or private organization with a mandate to protect the environment that has submitted written comments during the public comment period.

Any person aggrieved, any ten persons of the Commonwealth, or a governmental body or private organization with a mandate to protect the environment may appeal without having submitted written comments during the public comment period only when the claim is based on new substantive issues arising from material changes to the scope or impact of the activity and not apparent at the time of public notice.

(2) Notice of Claim. Any notice of claim for an adjudicatory hearing must be accompanied by a filing fee as specified in 310 CMR 4.06 and be sent by certified mail or hand delivered to the Department of Environmental Protection, postmarked within 21 days of the date of the certification.

(3) Contents of Claim. Any notice of claim for an adjudicatory hearing must include the following information:

(a) the 401 Certification Transmittal Number and Wetlands Protection Act Number, the name of the applicant and address of the project;

(b) the complete name, address, and telephone number of the party filing the request; the name, address and telephone number of any authorized representative; and, if claiming to be a person aggrieved, the specific facts that demonstrate that the party satisfies the definition of "aggrieved person" found in 314 CMR 9.02;

(c) a clear statement that an adjudicatory hearing is being requested;

(d) a clear and concise statement of facts which are grounds for the proceeding, the specific objections to the Department's written certification, and the relief sought through the adjudicatory hearing, including specifically the changes desired in the final written certification; and

(e) a statement that a copy of the request has been sent by certified mail or hand delivered to:

1. the applicant;
2. for projects in Outstanding Resource Waters, the public or private water supplier where the project is located, the Department of Conservation and Recreation for projects in Areas of Critical Environmental Concern, or other entity with responsibility for the resource;
3. the owner, if different from the applicant;
4. the appropriate regional office of the Department; and
5. the conservation commission of the city or town where the activity will occur.

(4) Coordination of Appeals. The Department may coordinate adjudicatory appeals under 314 CMR 9.00, 310 CMR 10.00, 310 CMR 9.00 or other administrative appeals.

(a) If a final order has been issued pursuant to 310 CMR 10.00, the Department may exclude issues within the jurisdiction of 310 CMR 10.00 at an adjudicatory hearing held under 314 CMR 9.00.

(b) If an adjudicatory hearing has been requested under 314 CMR 9.00, 310 CMR 9.00, 310 CMR 10.00, or another administrative appeal, the Department may consolidate the proceedings.

9.11: Enforcement

Failure to comply with 314 CMR 9.00 or a 401 Water Quality Certification shall be enforced as provided in M.G.L. c. 21, §§ 42 and 44, M.G.L. c. 21, §16A and 310 CMR 5.00.



9.12: Authorization of Emergency Action

In the rare situation where immediate action is essential to avoid or eliminate a serious and immediate threat to the public health or safety or to the environment, a person may act without a certification, provided that the person obtains prior approval of the Department or authorization under M.G.L. c. 131, § 40. Any emergency authorization issued by the Department shall not relieve such person from compliance with other applicable federal, state, and local requirements and approvals, including approval by the Corps of Engineers. The Corps of Engineers' emergency provisions for Section 404 permits are located at 33 CFR 325.2(e)(4).

(1) Any activity subject to the jurisdiction of 310 CMR 10.00 which has been certified as an emergency by a conservation commission conducted in accordance with 310 CMR 10.06, or by the Department under 310 CMR 10.06(5), or is authorized under 310 CMR 10.06(6)(a)4., and any oil or hazardous material "Immediate Response Action" undertaken in accordance with the provisions of 310 CMR 10.06(7), is also authorized under 314 CMR 9.00.

(2) Absent authorization under 310 CMR 10.00, a written request shall be submitted to the Department which describes the location, the work to be performed, and why the project is necessary for the protection of the environment or the health or safety of the public. Emergency approval shall be issued in writing and shall specify the limits of activities necessary to abate the emergency. When the necessity for undertaking the emergency action no longer exists, any emergency action shall cease until compliance with the provisions of 314 CMR 9.00. In any event, the time limit for performance of emergency work shall not exceed 30 days, unless a written extension is approved by the Department. The emergency authorization may require the submission of an application. No work may be undertaken without emergency authorization under M.G.L. c. 131, § 40, M.G.L. c. 91, and M.G.L. c. 30, §§ 61 through 62H, where applicable.

(3) Any activity subject to the jurisdiction of 310 CMR 9.00 which is eligible for authorization by the Department under 310 CMR 9.20 may receive emergency authorization under 314 CMR 9.12, provided that the applicant submits sediment data or other information if requested by the Department.

(4) "Immediate Response Actions" not subject to the jurisdiction of 310 CMR 10.00, which receive oral approval from the Department pursuant to 310 CMR 40.0420(2), or are initiated 24 hours prior to notification and oral approval pursuant to 310 CMR 40.0420(7) and (8), may commence before a written request under 314 CMR 9.12(2) is submitted to the Department, provided the request is made within 24 hours after the Department's oral approval. Once a request for emergency certification has been made pursuant to 314 CMR 9.12(2), work that commenced prior to such filing may continue pending a decision on the request by the Department.

9.13: Effective Date, Transition Rule, and Severability

(1) 314 CMR 9.00 shall take effect on January 2, 2008. Any application submitted to the Department prior to January 2, 2008 shall be considered under the standards and criteria in effect prior to January 2, 2008, including the Stormwater Management Standards as set forth in the Stormwater Policy issued by the Department on November 18, 1996.

(2) Transition Rule. When an applicant has filed a Notice of Intent under M.G.L. c. 131, § 40 prior to March 1, 1995 for which a Final Order is subsequently issued and the planning board approves a definitive subdivision plan pursuant to M.G.L. c. 41, §§ 81K through 81GG or determines that approval is not required based on plans that substantially conform to the Notice of Intent, activities related to a real estate subdivision shall be subject to the substantive standards as previously in effect under 314 CMR 9.00 dated December 31, 1983. Such activities shall be subject to the application provisions of the revised 314 CMR 9.00 effective March 1, 1995, but not including 314 CMR 9.06 through 9.10.

314 CMR: DIVISION OF WATER POLLUTION CONTROL

9.13: continued

(3) Severability. If any provision of any part of 314 CMR 9.00, or the application thereof, is held to be invalid, such invalidity shall not affect any other provision of 314 CMR 9.00.

REGULATORY AUTHORITY

314 CMR 9.00: M.G.L. c. 21, §§ 26 through 53, c. 21A § 14; c.21C; c. 21E; c. 21H; c. 91, §§ 52 through 56; and c. 111, §§ 150A through 150A½.