

Discharges into Cape Cod Bay

What is allowed, and what is not?

Statutes, Permits, and Regulations

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Statutes, Permits and Regulations

Clean Water Acts

Pilgrim's NPDES and State Permits

Massachusetts Laws and Regulations

Where are we now?

Clean Water Acts

33 U.S.C., secs 1251
seq.

MGL ch 21, secs.
26-53)

- **U.S. Clean Water Act, Sec. 301(a)** - Except as in compliance with this section and sections 302, 306, 307, 318, 402, and 404 of this Act, the discharge of any **pollutant** by any person shall be unlawful.
- **EPA Website - [NPDES Permit Basics | US EPA](#)**
The [U.S.] Clean Water Act prohibits anybody from discharging "**pollutants**" through a "point source" into a "water of the United States" unless they have an NPDES permit.
- **U.S. Clean Water Act, Sec. 402(a)(1)** – [T]he Administrator **may**, after opportunity for public hearing, **issue a permit for the discharge of any pollutant**, or combination of pollutants, notwithstanding section 301(a)....
- **EPA Website - [NPDES Permit Basics | US EPA](#)**
The permit will contain limits on what you can discharge, monitoring and reporting requirements, and other provisions to ensure that the discharge does not hurt water quality or people's health.

Clean Water Acts

33 U.S.C., secs 1251
seq.

MGL ch 21, secs.
26-53)

- **Mass Clean Water Act, Ch 21, Sec 42** – Any person who ... discharges or allows the discharge of any pollutant into waters of the commonwealth, except in conformity with a permit issued under section 27 or 43 ... (a) shall be punished by a fine..., or by imprisonment...
- **Mass Clean Water Act, Ch 21, Sec 43(2)** – No person shall discharge pollutants into waters of the commonwealth nor construct, install, modify, operate or maintain an outlet for such discharge or any treatment works, without a currently valid permit issued by the director.
- **31 CMR, Sec 3.03** – No person shall discharge pollutants to surface waters of the Commonwealth without a currently valid permit from the Department pursuant to M.G.L. c. 21, § 43 and 314 CMR 3.00, unless exempted in 314 CMR 3.05

Clean Water Acts

What is a Pollutant?

- U.S. Clean Water Act, 35 U.S.C. 1362(6):
 - The term “[pollutant](#)” means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.
- Mass. Clean Water Act, Sec.26A:
 - Pollutant”, any element or property of sewage, agricultural, industrial or commercial waste, runoff, leachate, heated effluent, or other matter, ... which is or may be discharged into ... waters of the Commonwealth.
- Pilgrim’s permits define “pollutant” more narrowly than do the statutes:
 - *Pollutant* means ... filter backwash, sewage,... chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 *et seq.*)),... and industrial, municipal, and agricultural waste discharged into water.

Pilgrim's Permits

What do they Authorize?

“The Permittee **is authorized to discharge only** in accordance with the terms and conditions of this permit and only from the outfalls listed in Parts I.A. through I.C. of this permit.” Sec. I.B.1

1. **Circulating water** through Outfall Serial Number 001....
2. **Non-thermal backwash water** through Outfall Serial Number 002.
3. **Non-contact cooling water** from the Salt Service Water (SSW) system, classified as low volume waste, through Outfall Serial Number 010.
4. **Intake screenwash water** through Outfall Serial Numbers 012
5. **Stormwater** through Outfall Serial Numbers 004 and 005
6. **Stormwater** through Outfall Serial Numbers 006, 007, and 013
7. **Stormwater** from electrical vaults (manholes) through internal Outfall Serial Numbers 004A (manhole MH-41), 004B (manhole MH-21), 005A (CP-41), and 005B (MH-27A1)
8. **Station heating system water, cooling water** from heat exchangers of the Turbine Building Closed Cooling Water (TBCCW) system and Reactor Building Closed Cooling Water (RBCCW) system, **drainage from the floor** drains in the boiler room (station heating water), **SSW system chlorinated salt water** from various sumps in the Turbine and Reactor buildings, and **reject water** from the demineralizer system through Internal Outfall Serial Number 011
9. **Cooling water** from heat exchangers of the Turbine Building Closed Cooling Water (TBCCW) system and Reactor Building Closed Cooling Water (RBCCW) system, **SSW system chlorinated salt water** from various sumps in the Turbine and Reactor buildings, and, **reject water** from the emergency standby liquid control system through Outfall Serial Number 014.

Pilgrim's Permits

What do they Not Authorize?

Unauthorized Discharges - Sec. I.B.

1. The Permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from the outfalls listed in Parts I.A. through I.C. of this permit.

2. The discharge of pollutants in spent fuel pool water (including, but not limited to, boron) is not authorized by this permit.

3. The discharge of pollutants in stormwater ... associated with the dismantlement and demolition of plant systems, structures, and buildings is not authorized by this permit.

4. Discharges of pollutants associated with ... dewatering and including ... physical alterations or additions resulting in the discharge of pollutants associated with the dismantlement and decontamination of plant systems and structures and/or the demolition of buildings are not authorized by this permit.

Amending Pilgrim's Permit

EPA letter of June 17 to Holtec

The October 17 Meeting

“Holtec Pilgrim may choose to seek authorization for such discharges of pollutants; EPA would analyze any such request in accordance with the CWA and NPDES regulations and may, if appropriate, authorize such a discharge via a permit modification or coverage under an applicable general permit.”

“EPA has not prejudged the outcome of any permit modification proceeding. Rather, if presented with a modification request and an appropriate characterization of the proposed discharges, EPA would analyze the submission in accordance with applicable Clean Water Act requirements, including that discharges must meet technology-based effluent limits or any more stringent limits necessary to meet state water quality standards.”

At the October 17th meeting, Holtec was told that the EPA reiterated its position that, whether or not treated or processed, Holtec would need an amended permit to discharge Pilgrim's spent fuel pool and other contaminated water into Cape Cod Bay; and that it would take 1-2 years for an amended permit to issue.

Pilgrim's Permits

How clean must the discharged water be?

- **Will processing or treatment remove all pollutants?**
 - **Holtec 2019 Environmental Operating Report to the NRC:**

“Of all wastes processed through liquid radwaste treatment, 90 to 95 percent of all wastes are purified...”
 - **HDI President May 24, 2022 letter to EPA:**

“Interpreting the current NPDES permit to prohibit HDI from discharging spent fuel pool water that has been treated in the NRC-regulated treatment system unless the processed water contains zero “pollutants” would require significant changes in the plant design and add significant costs to the operation of PNPS...”
- **Is it enough to remove most pollutants?**
 - **EPA – Feb 17:** “[D]ischarges of spent fuel pool water are ... explicitly prohibited by the company’s Clean Water Act (CWA) discharge permit, unless there are **no** CWA-regulated pollutants present.”
 - **Holtec – May 24:** “HDI asseverates ‘[t]he discharge of pollutants in spent fuel pool water ... is not authorized by this permit’ to be limited to spent fuel pool water prior to becoming processed...”
 - **EPA – June 17:** “EPA does not agree with your position.... [Y]our reading of the permit is, in fact, plainly inconsistent with the unambiguous provisions of the permit.”
 - **Holtec NDCAP – July 25**
 - **Q.** Will you agree not to discharge spent fuel pool water, processed or not, until or unless the EPA says that is permitted under your permit?
 - **A.** Mr. Noyes: Containing pollutants

Massachusetts Laws and Regulations Holtec's Agreements to Comply

Settlement Agreement between Holtec and the Commonwealth, Par. 10(I):

- Holtec shall comply with all applicable environmental and human-health based standards and regulations of the Commonwealth.”

Reported in *Provincetown Independent*

- “Holtec spokesman Patrick O’Brien said in an email, ‘As we have always done, we will comply with our permits related to the potential future discharge and should a discharge be deemed illegal, we would look at alternative means of disposal.’”

25 July 2022

16 June 2020

9 Nov. 2022

Statement to NDCAP

- We “would not pursue discharge of water in violation of any state or federal requirement.”

Massachusetts Laws and Regulations

The Ocean Sanctuary Act

The Clean Water Act

The Massachusetts Ocean Sanctuary Act:

- MGL ch 132A, Sec. 15: “Except as otherwise provided in this section, the following activities shall be prohibited in an ocean sanctuary, ... (4) the dumping or discharge of commercial, municipal, domestic or industrial wastes; provided, however, that the department may approve a new or modified discharge of municipal wastewater from a POTW in accordance with section 16G;
- 301 CMR 27.03 – Definitions: “Wastes means any unwanted, discarded, or environmentally harmful solid, liquid, or gaseous materials resulting from commercial, municipal, domestic, or industrial Activities...”

The Massachusetts Clean Water Act:

- MGL ch 21, Sec. 43(2) – No person shall discharge pollutants into waters of the commonwealth nor construct, install, modify, operate or maintain an outlet for such discharge or any treatment works, without a currently valid permit issued by the director.
- MGL ch 21, Sec. 26A - Pollutant”, any element or property of sewage, agricultural, industrial or commercial waste, runoff, leachate, heated effluent, or other matter, ...which is or may be discharged into ... waters of the Commonwealth.

The acts’ definitions of “waste” and “pollutant” encompass both chemical and radioactive materials. Neither excludes any radioactive contaminants.

Where are we now?

The EPA

The AGO and Governor-
Elect

Holtec

- The EPA (June 17, 2022):
 - “In summary, Holtec Pilgrim is not authorized under the current NPDES Permit to discharge pollutants in spent fuel pool water.”
- The Governor-Elect (June 13, 2022):
 - “We’ve come a long way on this issue, and I’ll be damn sure, in whatever capacity I serve, that we’re not going to have radioactive waste dumped down here”
 - The state has the authority to stop the discharge based on a settlement agreement with Holtec, combined with state and federal law.
- The Office of the Attorney General (September 26, 2022):
 - “Our office will do everything possible to hold Holtec accountable and ensure public health and safety throughout the decommissioning process. We prepared to take action to halt any violations of state and federal water discharge permits.”
- Holtec: Provincetown Independent (November 9, 2022)
 - “O’Brien said that four options remain on the table, including evaporating the water, storing it onsite, or shipping it to a disposal facility.”
 - “While the company continues to favor the release of the water into Cape Cod Bay, O’Brien said it may use a combination of all four.”
- Holtec: Letter from Trice to Senator Markey (November 17, 2022)
 - We expect that all methods of water treatment will be utilized including treated water release, evaporation, transport for final disposition at an approved offsite facility, or onsite storage.